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Star

OFFICIAL ORGAN OF THE NORTHWEST FRUIT GROWERS ASSOCIATION

U. S. Department of Agriculture

VOLUME FOUR

NUMBER ONE

DOLLAR A YEAR

BETTER FRUIT

July 1909

ALASKA-YUKON-PACIFIC SPECIAL



Photo by F. H. Nowell. Copyright 1909

Engraved by Hicks-Chatten Co., Portland, Oregon

ALASKA - YUKON - PACIFIC EXPOSITION, SEATTLE, WASHINGTON, JUNE 1 TO OCTOBER 1, 1909
Looking up Cascade Court toward Main Government Building

PUBLISHED BY
BETTER FRUIT PUBLISHING COMPANY
HOOD RIVER, OREGON

WHITE SALMON Apple Land

For Sale on Easy Terms

- 10 acres, uncleared, per acre, \$90
- 40 acres, 175 trees, 5 acres cultivated, \$4000
- 40 acres, uncleared, \$3500
- 20 acres, partly improved, \$7000
- 160 acres, 20 acres cleared, \$8000
- 40 acres, 15 acres in orchard, remainder nearly cleared, for \$6000
- 160 acres, 60 acres nearly cleared, \$8000
- 40 acres timber, \$1600
- 80 acres, 50 acres cleared, 600 trees, two-year-old, \$10,000
- 40 acres, 4 acres orchard, 6 acres hay, 20 acres cleared, \$5000
- 400 acres, a good development proposition

VAN VORST AND WELLS
WHITE SALMON, WASHINGTON

WATER IS KING

IRRIGATED ORCHARDS

Are the only solution of the problem of INCOME during the five years necessary for the growth of the trees to the bearing age. This is a VITAL FACT which every homeseeker should take into consideration. By planting potatoes, tomatoes, berries and vegetables between the trees where irrigation is used, as high as \$200 per acre has been taken off annually. In many cases the orchards pay for themselves, when irrigation is used, BEFORE they come into bearing, in addition to furnishing a living for the owner and family. Would you gamble on the elements in any other line of business? Don't take chances, then, in orcharding. Irrigation is insurance for a regular and heavy crop. If you have any idea of coming West; if you are tired of the uncertainty of farming there; if you are on a salary and want to better your condition; if, for any reason, you are interested in fruit growing, *you will be vitally interested* in the proposition of the Sutherlin Land & Water Company, which owns the wonderful Sutherlin Valley in Douglas County, Oregon. Don't fail to write today for a beautiful booklet (free) telling much of importance to you. It may mean an immense saving of labor and time to you and a competency that would otherwise be impossible.

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Head Offices: ROSEBURG, OREGON

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NEWTOWNS

Prunes

Peaches

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Plums

Apples

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A three-year-old Spitzemberg apple tree at White Salmon

Located across the Columbia River from Hood River, Oregon, the White Salmon Valley offers the greatest opportunities of any land on earth to fruit growers. Where apples, cherries, pears, peaches, prunes and strawberries grow to perfection. A few dollars invested in fruit land today will return to you in a very few years sixty-fold. The soil, climate, water and scenery are unsurpassed by that of any country. Build a home where you can enjoy peace and plenty the remainder of your life. Fruit lands cleared, planted and cared for until in a bearing condition. Write us for descriptive matter and prices.

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SPITZEMBERGS

WINESAPS

Berries

Cherries

Strawberries

Nuts

WINTER APPLES

WILL MAKE A MAN RICH ON TEN ACRES OF SPOKANE VALLEY LAND



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J. B. POWLES & CO. have never failed to render a true and just account for every pound, crate and box of fruit sold to grower's account. Every effort that this house can make, the whole theory of its business, is absolute, strict, straightforward honesty.

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operating in all the fruit growing sections of the civilized globe*

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and was the first fruit house to extensively introduce the Northwestern product to the consumers of the East. With able representation in all the leading markets STEINHARDT & KELLY are enabled to handle the entire crops of the most extensive districts with utmost ease and celerity

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**Want Cars of Apples, Peaches, Pears, Etc.
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The oldest established commission house in Seattle. We have over 1,800 shippers on our books, a list of which we gave to the Washington State Fruit Inspector. We have endorsements from the largest growers and shippers on the Pacific Coast, every one of whom will vouch for our ability to handle goods. Give us a fair trial and be convinced. WE REMIT WEEKLY OR OFTENER IF REQUIRED. We report the day the goods are received and their condition on arrival. WE REPORT THE DAY THE GOODS ARE SOLD. The proprietor of the California Commission Company, Mr. William Meister, has devoted his entire life to the fruit business, and all consignments are handled under his direct supervision. Our house is headquarters for Cashmere fruit and we also handle a large volume of fruit from the Wenatchee Valley. We have the largest list of shippers in the State of Washington, with endorsements from each of them which ought to be good enough for you. We handle everything grown on the farm and in addition we handle veal, hogs, poultry, hides or anything that is marketable. We refer you to R. G. Dun & Co., the largest commercial agency in the world; Puget Sound National Bank of Seattle, also the principal and largest growers in Washington, Oregon, California, Canada and the Hawaiian Islands.

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Jobbers and Brokers of Fruits and Produce

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Codes: CITRUS, BAKERS, REVISED ECONOMY, MODERN ECONOMY

We enjoy a large local and city trade and are the largest shippers of fruit to Alaska. We are the only bonded commission house in Seattle, with the Produce Reporter Co., of Chicago. The oldest commission house on Puget Sound.

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MERCHANTS***Cipher codes: Revised Economy, Modern Economy,
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FRUIT CO.
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Pioneer fruit packers and shippers of this famous section. "Quality" is our watchword, and "Fruit Worth the Price" is our motto. Wire or write us for apples, strawberries or pears in season in car lots or smaller shipments. Other fruits in season in less quantities.

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We have modern cold storage facilities essential for the handling of your products.

Reliable market reports

PROMPT CASH RETURNS

**ALL A.-Y.-P. E.
FRUIT**

sold on the grounds this year will be ours exclusively. If you have anything nice to ship we can use it. Write us today.

Gordon & Company

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Get in touch with a live, progressive firm. We would be glad to advise you our market conditions and receive your shipments

WE MAKE A SPECIALTY OF
Fancy Fruits and Vegetables
IN CAR LOTS OR LESS**ELERATH & RADFORD**

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HORTICULTURAL
UNION**

NORTH YAKIMA, WASH.

*E. E. Samson, Manager*APPLES, PEARS, PRUNES, PLUMS,
PEACHES, CHERRIES, APRICOTS,
GRAPEs AND CANTALOUPEsMixed carloads start about July 20.
Straight carloads in season. Our
fruit is the very best grade, and
pack guaranteed.

We Use Revised Economy Code

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ST. LOUIS is the best local market and distributing point to ship your apples, and hold on cold storage, for highest winter prices.

OREGON, WASHINGTON & IDAHO
Fruit Associations, Growers & Shippers

I solicit your carload shipments of box apples this fall for cold storage here. Will advance freights and pay insurance, charging usual commission and interest.

Storage rates 15 cents per box for
season ending May 1.

Only Extra Fancy Fruit wanted.

I do business with the Mound City Ice and Cold Storage Company, the largest and most modern apple storage house in the middle West. Cars unloaded direct into coolers.

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M. O. TIBBETTS, President E. T. BALCH, Secretary

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Wholesale Fruits**

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 Specialties: Apples, Peaches, Pears
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 CAR LOTS A SPECIALTY
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 Apples, Peaches and Strawberries
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Consignments solicited with quick returns
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FAMOUS HOOD RIVER
Strawberries
 THE FINEST BERRY
 ON EARTH AND
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 LOOK GOOD, BUT TASTE BETTER
Fancy Pack Guaranteed
FRUIT GROWERS UNION
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Top Prices and Prompt Returns
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"The Cherry City"

Famous Willamette Valley

STRAWBERRIES

Always Good

Ready for Shipment Now

CHERRIES, JULY TENTH

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LINCOLN, NEBRASKA

Wholesale Fruit Merchants

Largest receivers and distributors of Western apples, strawberries, raspberries and blackberries in Nebraska. Send us your shipments. We will get you the highest market prices and remit promptly.

Correspondence Cheerfully Answered

References: Corn Exchange National Bank, Chicago; Chatham National Bank, New York City; First National Bank, Lincoln, Nebraska; Richey & Gilbert Company, Toppenish, Washington; Yakima County Horticultural Union, North Yakima, Washington

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129 Front Street, Portland, Oregon

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Are Solicited, all Your Shipments Receiving our Personal Attention

ROGUE RIVER VALLEY

Famous for its APPLES, PEARS, PEACHES, GRAPEs, MELONS AND CLIMATE

THE natural home of the Spitzberg and New town apples. Rogue River pears have led the United States for past five years in the highest price in the New York market. No peaches of the South excel those of Rogue River, and trees are healthy. Grapes perfection in color and flavor and the best of shippers, and growers have more orders than they can fill. Rogue River canteloupes, water-melons and casabas, none better and big money makers. The Rogue River Fruit Growers' Union gets the highest price for fruit, and the Southern Pacific gives terminal rates on shipments East. Climate the perfect medium between arid California and wetfoot Oregon. No storms or winds to injure fruit crop. Almonds and figs ripen perfectly and palms grow in the yards. Land yet cheap, but will double in two years. American community and good schools, rural mails, telephones, etc. Full information by addressing CHARLES MESERVE, Medford, Oregon, Seller of Real Estate in All Parts of Rogue River Valley. References by permission: Rogue River Fruit Growers' Union, First National Bank of Medford.

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APPLES, PEARS, PRUNES

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Correspondence Solicited

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Livingstone, Billings, Sheridan, Montana

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WE HAVE MODERN COLD STORAGE FACILITIES
ESSENTIAL FOR HANDLING YOUR PRODUCTS

A strong house that gives reliable
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THE Nelson Bros. Fruit Co. PAONIA, COLORADO

We will make a specialty of filling f. o. b. orders on Elberta Peaches and high grade Jonathan, Rome Beauty and other North Fork Apples this season and invite correspondence from those who will be in the market to buy. Let us put your name on our list and will keep you advised and quote you when shipments are ready to move.

The Lawrence - Hensley Fruit Co.

Successors to
THE LIEBHARDT FRUIT CO.

Jobbers of

Fruits and Vegetables

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Denver, Colorado

Greater Activity and Development than any Point on Line



Put Your Cash Where the Arrow Points. There is Leaven in it

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J. J. REID, President 340 Chamber of Commerce, Portland, Oregon

Nut and Fruit
Tracts in

CLIFFS ACRES
GOODNOE HILLS

RIVER FRONT
TRACTS

All in the Vicinity of
CLIFFS, WASH.

ALWAYS A FRUIT CROP IN HOOD RIVER VALLEY

With best of prices, scenery, climate, transportation, soil, mountain water, timber, etc. Send for our list of lands and literature

G. Y. EDWARDS & CO.

Hood River, Oregon

Benton, the Blue Ribbon County of Oregon
First Premium State Fair 1907-08

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County seat of Benton, in the heart of the famous Willamette Valley. Greatest dairy section of the West. Land unsurpassed for walnuts and fruit. Irrigation not required. Apples and peaches have better flavor and keep longer than those grown under irrigation. Extensive plantings of commercial orchards near Corvallis. The best farm lands cheaper than at any place in the valley; no inflated values. Corvallis has a population of 6,000; 200 new residences constructed since January 1, 1908. Oregon Agricultural College, the largest educational institution in the Northwest, 1,500 students, located here. Pure mountain water and all modern conveniences. No extremes in temperature. Opportunities here worth your while. For particulars write

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The Dalles, Oregon

Fruit, Wheat and Stock Farms

For sale in Eastern Oregon and Washington. Acre tracts in any quantity desired, with or without trees planted, within one mile of city. We are sole agents for the sale of five and ten-acre tracts in Peachland Park, which we can sell you on easy installments and care for the orchard until it is in full bearing. This is a beautiful tract of land situated one mile west and overlooking the city. The soil is a rich, deep, sandy loam, and is set out on the most approved methods to peaches and cherries. Some of the trees are three years old. Write to us for full particulars.

Willamette Valley Fruit Lands

in tracts to suit. Rich soil, delightful climate. For descriptive literature write
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Hood River Abstract Company
Hood River, Oregon
ABSTRACTS INSURANCE
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**LAND
OF BIG, RED APPLES**

WE ALWAYS HAVE SOME
CHOICE TRACTS TO OFFER

At popular prices, and sell them strictly on
their merits. Years of study given to Hood
River and its products. Can sell you intel-
ligently. Call on or address

Geo. D. Culbertson & Co.
Leading Land Agents Hood River, Oregon

**THE HOOD RIVER
LAND EMPORIUM
HOOD RIVER, OREGON**

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CLIMATE—A desirable medium between the drier eastern and the more moist western conditions of the Northwest.
SOIL—Volcanic ash, rich in phosphates, and recognized as the best in the world for apples and strawberries.

Makes a specialty of real estate, conveyancing, loans and surveying. The president, John Leland Henderson, is a practicing lawyer residing in Hood River, and has been identified with the Hood River Valley for thirty years.

LAND

Apples, Peaches, Cherries and Apricots are moneymakers. Why not buy land where they grow to perfection. I have some bargains

Roe A. Deal, Springville, Utah

Upper Hood River Valley

Cheap and the best of land. Plenty of water for irrigation at low rates. Good transportation facilities. You are cordially invited to see what I have done at my home in six years. I handle these lands.

W. H. MARSHALL
Dee, Oregon In Hood River Valley

Live facts in a lively way. Live facts for men and women. Facts that affect you—your family

**Hood River Valley
APPLE LANDS**

Are paying from \$400 to \$700 an acre to their owners. Many started in a small way, today they are independent. You can begin today. It pays to see us

He who investigates for himself becomes "the man who knows."

W. J. BAKER & CO.
Hood River, Oregon

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REAL ESTATE, INSURANCE AND LOANS
ORCHARD LANDS A SPECIALTY
CITY HOMES, BUSINESS PROPOSITIONS, ETC.

"Ashland the Beautiful"

Is noted as the health metropolis of Southern Oregon, possessing the purest mountain air and water in the world, besides containing medicinal springs of high quality. It is also noted for luscious fruit of all kinds, and as being the producer of the famous Newtown Pippin and Spitzenberg apples, the best in the world. Fine orchard land for sale at living prices, ranging from \$55 to \$250 per acre for the raw land, according to location, etc. Developed orchards higher. Correspondence solicited.

YOCKEY & BEAVER, Ashland, Oregon

English Walnuts

AND

Royal Ann Cherries

We are the largest owners and planters of walnuts in Oregon. Our properties are in Yamhill County, the Walnut County. We sell planted five acre tracts \$100 cash and \$15 per month with four years' care

The Churchill-Matthews Co.
Incorporated

Lumber Exchange Building, Portland, Oregon

MOSIER

Also called East Hood River

FRUIT LANDS

In large or small tracts. Some very good land at low prices at present. Good growing community. Six miles east of Hood River. Parties wishing to buy will do well to write or see

GEO. CHAMBERLAIN
MOSIER, OREGON

**HOOD RIVER
APPLE LAND**

For Sale on Easy Terms

10 acres, uncleared, per acre	\$125
20 acres, complete place	\$20,000
24 acres, 500 trees	\$5000
40 acres, 7 acres in trees	\$5000
40 acres, uncleared	\$1600
80 acres, uncleared	\$2000
148 acres, partly cleared	\$5000
62 acres, 800 trees	\$10,220

J. Adrian Epping, Hood River, Oregon

**THE BEAUTIFUL
White Salmon Valley**

Land for Strawberries

Land for Orchards

Land for Dairying

Land for Stock Raising

For Sale By

Egan Hair Real Estate Co.
WHITE SALMON, WASHINGTON

White Salmon Valley Land

I HAVE 120 acres of fine apple and strawberry land one and one-half miles from town of White Salmon that will cut to advantage in five, ten and twenty acre tracts. This tract is well located, with fine view of surrounding valley and in plain view of beautiful snow-capped Mt. Hood. Will sell all or part. Also other tracts.

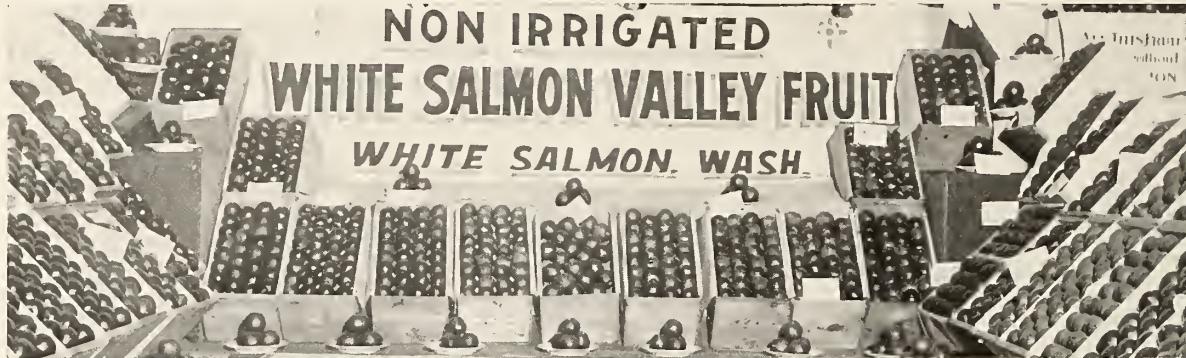
F. L. GORDON

WHITE SALMON, WASHINGTON

White Salmon Valley

WASHINGTON

Across the river from Hood River Valley, Oregon, in the Banner Apple Belt of the World



The WHITE SALMON VALLEY today presents OPPORTUNITIES FOR INVESTMENT beyond that of any other FRUIT REGION in the Northwest. It is the north half of a LARGE VALLEY lying between Mount Adams on the north and Mount Hood on the south. The mighty Columbia flows between and divides this valley. From the Columbia River to Mount Hood forms the Hood River Valley, and from the Columbia River to Mount Adams forms the White Salmon Valley. Both these mountains are snowclad all the year and influence the climatic conditions. This, together with a volcanic ash soil, produces apples that are superior to all others in the world in FLAVOR, SIZE, COLOR, and, most important of all, KEEPING AND SHIPPING QUALITIES.

Ninety per cent of the fruit grown in this valley is exported, bringing the highest market prices.

THE CLIMATE of this region is ideal. It is located in the midst of the CASCADES, with a pure mountain air and free from excessive rains or drought. The snow-covered peaks at either end of the valley temper the heat of summer and make the summer nights cool and invigorating. The winters are as a rule mild and short. The scenery is as fine as may be found anywhere on the continent.

The valley has been held back heretofore through lack of railroad transportation, but the SPOKANE, PORTLAND & SEATTLE RAILROAD, part of the Hill system, now in operation, gives this valley the best of shipping facilities.

NOW IS THE TIME TO SECURE A CHOICE ORCHARD TRACT AT A LOW FIGURE. Write today for particulars of this wonderful valley to the

WHITE SALMON VALLEY DEVELOPMENT LEAGUE, WHITE SALMON, WASHINGTON

A PARTIAL LIST OF BARGAINS FOR SALE BY R. Field & Co. WHITE SALMON, WASHINGTON

You will have to act quickly if you want any of them, because land in this famous

WHITE SALMON VALLEY

Is rapidly increasing in value

Prompt attention given to all legal papers intrusted to our charge. We have some good bargains in timber lands. DON'T FORGET THAT NOW IS THE TIME TO BUY

No. 224—ONE HUNDRED AND SIXTY ACRES, near Glenwood; 120 acres is level and balance is rolling. About 15 acres is under cultivation and balance is covered with good pine timber. The soil is a deep sandy loam, adapted to all kinds of grain, hay and hardy vegetables and fruits. Has a few fruit trees on it, three good springs and an independent irrigating ditch with sufficient water to irrigate the whole of it. Good 4-room house and other outbuildings. This will make a fine dairy ranch. Price \$4,000; \$2,500 cash and balance on good terms.

No. 167—4 acres close to town. Very rich fruit land and early strawberries. Unimproved, some slashed, and will make a nice home. Price, \$1,800. One-half cash, balance on terms.

No. 172—39 acres, five miles out. Mostly unimproved, but has some clearing. All good fruit land, easy to clear. School and church on place. Price, for a short time, \$2,600; terms to suit.

No. 176—58½ acres, 4½ miles out, two miles from railroad station and boat landing. All good fruit land except 8 acres which is too steep to cultivate. Creek runs through the place; three good springs. 20 acres in cultivation; 4 acres in bearing orchard, 12 years old, mostly apples; 50 trees ready to set out. Good five-room house, barn and other outbuildings, all under fence and on county road. Price, \$5,000; terms.

No. 182—10 acres, one-half mile out. Deep, rich soil; 7½ acres in high state of cultivation; gentle southwest slope, easily cultivated; very early fruit and berry land. The irrigating ditch will run on the north line, making very little expense to connect. Has 6 acres out to fruit trees from one to three years old; one acre to strawberries; balance of land easily cleared. Nicely sheltered and a magnificent view. Good new nine-room house just built; plenty of tools, such as plows, harrows, culti-

vators, etc. This can be made one of the best homes in White Salmon. Price, \$6,000; can be had on easy terms.

No. 192—40 acres, unimproved, eight miles out. Good, red shot soil; apple land; about 25 acres is fine level land; 15 acres is rolling. Price, \$1,100; \$500 cash, rest terms.

No. 196—160 acres, nine miles out. Unimproved, with some fine fir timber on it; some is rolling and some is level land; soil rich red shot. Only \$16 per acre; terms, half cash, rest two years.

No. 199—30 acres, one mile from town; 15 acres cleared and mostly set out to fruit trees and strawberries; all under fence, with a fine creek of water running through it, which can be used for irrigating about 3 acres for garden which is very rich bottom land. Soil is light volcanic ash, very rich and good to keep up moisture in summer. Price, \$10,000.

No. 202—A fine unimproved 40 acres close to Husum, in the White Salmon Valley. Good soil for Spitz, and Newtowns. Is mostly level and is a good buy at \$4,000; half cash, rest in 2 years.

No. 203—40 acres 1½ miles from Snowden; 30 acres nice land, rest is rolling; some good fir timber. Good apple land, at only \$1,000, and will also sell 80 acres at same place at \$2,000.

No. 204—160 acres 9 miles from White Salmon. Good rich soil with large percentage volcanic ash; has a spring and creek on place. Would do well to cut up in 20-acre tracts; 140 acres tillable, 20 acres is rough; also 3,000,000 feet of fit timber on this place and not far to saw mill. Timber will more than half pay for the land and the price is only \$35 per acre. Terms.

No. 205—55 acres 2 miles from Husum; about 3 acres cleared; 40 acres level, rest is rolling. A good bargain at \$3,000; terms.

No. 206—40 acres 7 miles from White Salmon; the very best of fruit land; lies just nicely rolling for apples. There are some 8 acres cleared and rest mostly cleared; with a little work all can be put in soon. There are 500 fruit trees set out on it. The price is right, \$4,500; half cash, rest five years' time.

No. 207—160 acres 2 miles from Husum, unimproved; partly good for cultivation, partly pasture land; some good fir timber on it. A snap at \$20 per acre.

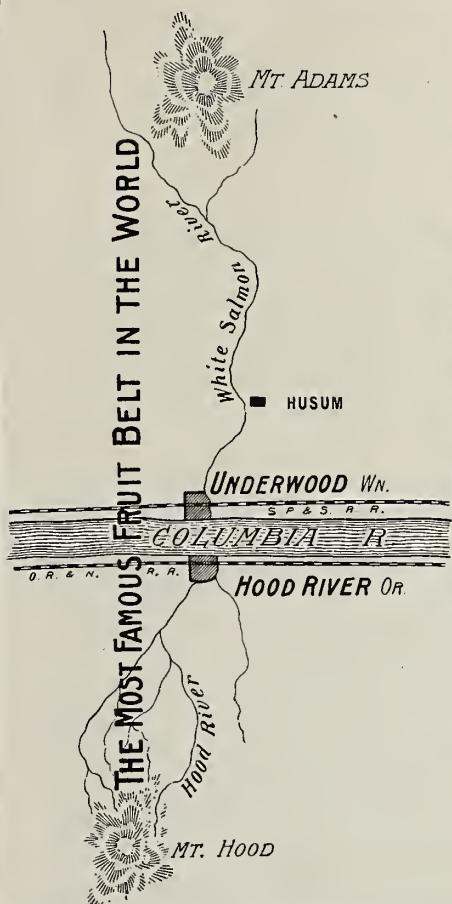
No. 208—160 acres 8 miles out; 90 acres level, rest is rolling, too steep to cultivate. Very rich red shot soil; 22 acres in high state of cultivation, 20 acres in orchard, mostly all bearing, in good condition. A house 18x30, 7 rooms, barn and other outbuildings. Price \$10,000; terms half cash. The orchard will pay for the land in a few years.

No. 209—160 acres 4½ miles from White Salmon; 2 acres cleared and in bearing orchard; some is level and some rolling land; a fine piece to cut into small tracts. Price \$65 per acre.

No. 210—We have for a short time for sale the famous Ziegler fruit farm in the apple belt, 8 miles from White Salmon; 120 acres; 25 acres in fruit trees just in bearing, Spitzbergs and Newtowns. The soil is very rich red shot, that from 120 acres half can be cultivated; rest is too rough. This place will pay for itself in a short time. Price only \$9,000; \$3,000 cash, balance, terms to suit.

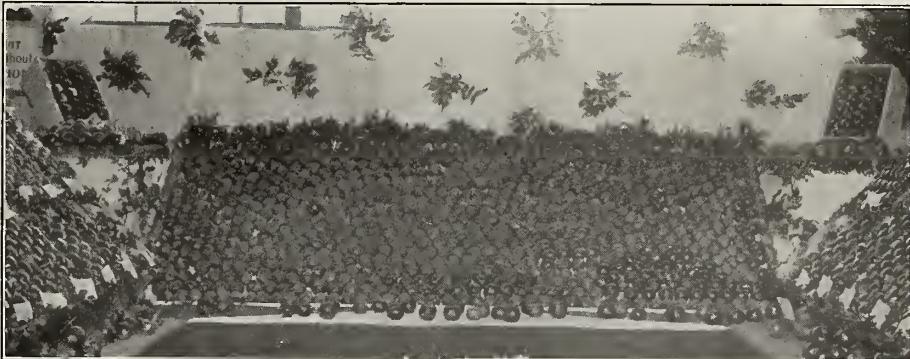
No. 211—40 acres, 12 miles out. All good rich shot land and level; the very best for apple culture; all under good fence; 20 acres heavy timber; fine spring of water; half mile from Snowden post office. Price \$1,800; terms.

No. 212—160 acres 11½ miles from White Salmon. All No. 1 tillable land, with 8-inch flow of water; 3 acres out to fruit trees and 40 acres in cultivation; has good house and barn. A snap at \$8,000. Good terms.



UNDERWOOD

The Gateway to the White Salmon Valley



WHITE SALMON VALLEY FRUIT GROWERS' UNION OF UNDERWOOD, WASHINGTON, Won three important premiums at Spokane—First on Best Four-Tier Newtowns, Second on Best Ten Boxes Newtowns, First on Best Pack.

Twenty minutes from Hood River by ferry. Two hours by rail, seven hours by boat from Portland. Twenty-five thousand acres first-class fruit land tributary to this point. Has a strong Apple Growers' Union, which controls output of the valley. Same fruit, same markets, same prices as Hood River has. Fine class of people coming in—a community of homes. Land close in to river and railroad, \$40.00 to \$150.00 an acre now, but advancing rapidly.

Write, phone or call on

W. F. CASH UNDERWOOD
WASHINGTON

COME TO

UNDERWOOD and HUSUM

FOR WHITE SALMON VALLEY ORCHARD LANDS

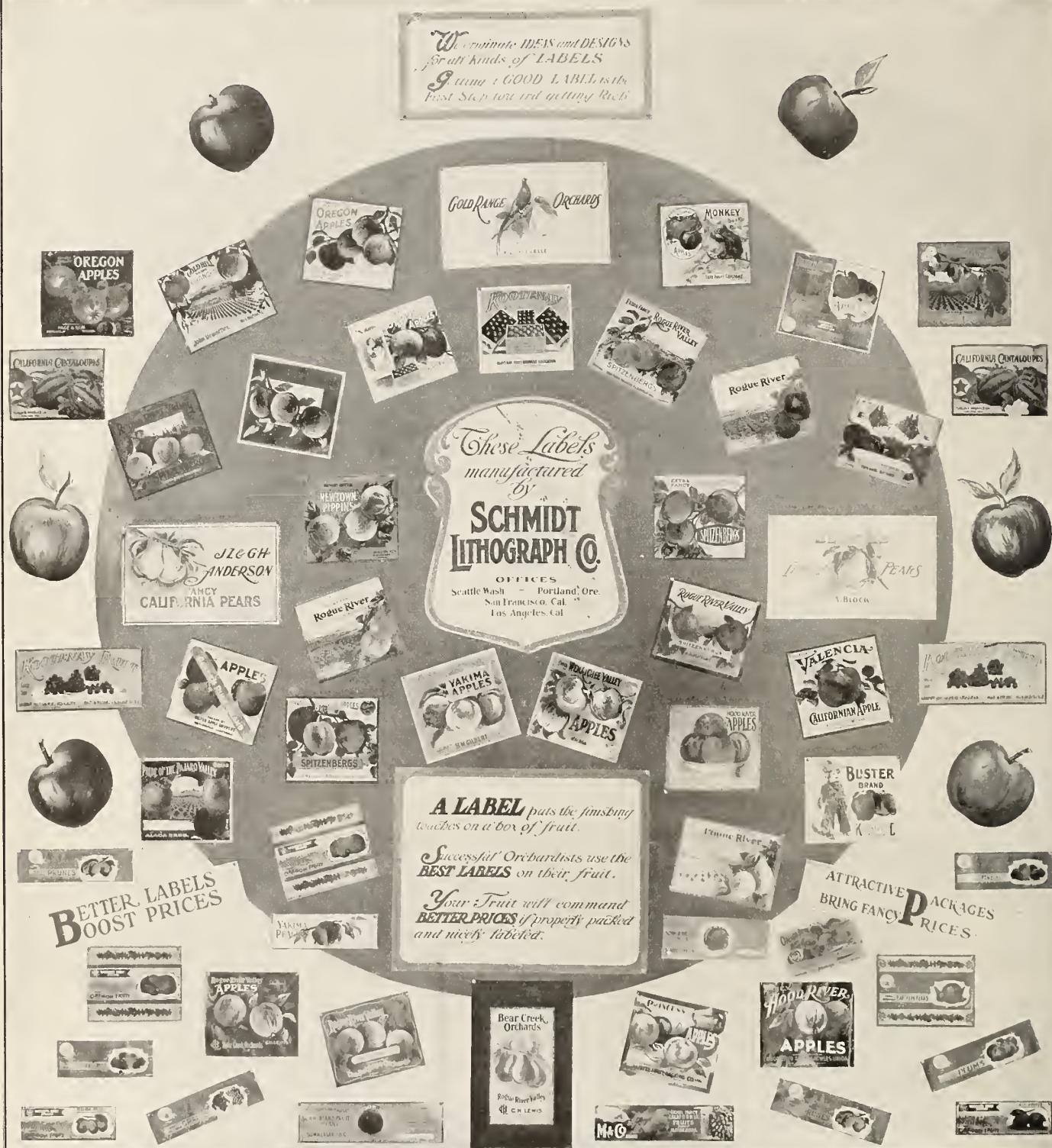
These two districts comprise the major part of the White Salmon Valley, which, separated from Hood River Valley by the Columbia River (a scant 1 1/4 miles), is just beginning to feel the effects of the great rush of Eastern people to these favored spots along the Columbia River. We have a territory greater than Hood River, while all our conditions are identical with that famous spot. We have a strong Apple Growers' Union, composed of wide-awake business men. At the National Apple Show we won first on best four-tier and second on best ten boxes of Newtowns, and first on best commercial pack.



Underwood, at the mouth of the White Salmon River, is twenty minutes by ferry from Hood River, and two hours by rail or seven hours by boat from Portland. All trains on the North Bank stop here, and the survey of a branch road to run up the valley to Husum has just been completed. Husum is six miles up the river, at the falls in the river and the forks of the Trout Lake and Camas Prairie roads. It has a hotel, store, post office, blacksmith shop, school, and an electric light plant intended to supply current to the people of the valley. This is destined to become a busy little town, as it is in the heart of the best orchard land of the valley. Good lands are comparatively cheap as yet. Full information from

SECRETARY OF IMPROVEMENT CLUB, Underwood, Washington

IF YOU SELL FRUIT
YOU SHOULD USE LABELS
 WE CAN MAKE THEM FOR YOU



OUR DISPLAY AT NATIONAL APPLE SHOW, SPOKANE, DECEMBER, 1908

WRITE US FOR SAMPLES AND PRICES

E. S. Morgan, Northwestern Manager, Wells Fargo Building, Portland, Oregon
 OUR STOCK LABEL SOUVENIR SAMPLE BOOK MAILED FREE ON REQUEST TO GROWERS, PACKERS AND SHIPPERS

PORLAND OREGON

"The Rose City"

Might well be termed "The Building City," as there are now under construction more "Class A" buildings than in any other two cities combined in this part of the United States.

Commands both the Columbia and Willamette Rivers, which occupy first and second place commercially between the Mississippi River and the Pacific Ocean.

Is the chief wholesale and distributing point of the Pacific Northwest, supreme in a trade territory of 250,000 square miles, the products of which roll "down grade to Portland."

Is second wheat port in the United States.

Stands fourth among American cities in the distribution of agricultural implements.

Has one-sixth the standing timber of the United States, or more than any other state. Government estimate, three hundred billion feet.

A vast undeveloped area now available to the homemaker and investor will go on the market in 1909. This will be the most luscious melon cut in Uncle Sam's domain during the present year.

Has arable land enough for twenty million people. Present population seven hundred thousand.

Does more than any other state to advance irrigation, being the largest contributor to the United States reclamation fund.

Is natural dairying state. Annual product \$17,000,000, an increase from \$5,000,000 five years ago. Western portion has pasture every month in the year. Ranks second in wool clip among the states.

Ships more lumber annually than any other port on earth—for the past two years production has averaged 2,000,000 feet for every working day of the year.

Is the pivotal point in railroad building in the Pacific Northwest. The Northern Pacific, Great Northern, and Chicago, Burlington & Quincy have united in building into Portland from the greatest agricultural section of the Northwest down the north bank of the Columbia. Their just-completed double-track bridges into the city cost three millions of dollars. Headquarters in the Pacific Northwest for the Southern Pacific, Oregon Railroad & Navigation Company, and numerous Harriman system branches. The Canadian Pacific has through trains from St. Paul to Portland. Four interurban electric railroad systems radiate from Portland.

Has been chosen by Swift & Company and other great packers as their supply point for the Pacific Northwest, Alaska and the Orient, and they are spending millions here.

Is building on an enormous scale, both for industrial and commercial purposes, with which home-building keeps pace.

Has absolutely pure water and a mild climate, which have given the city a death rate of but 7.14 per thousand, the lowest in the country. Complexions of Portland women are famous, and vie with the city's roses.

Oregon apples, pears and cherries find their way to the tables of sovereigns and multi-millionaires of every civilized land—they are the best.

Returns of from \$800 to \$1,000 per acre on fruit lands are not exceptional.

Poultry products, \$5,000,000 annually. Local market demands three times that amount at highest prices.

Has water-powers sufficient to operate thousands of factories and run electric lines throughout state.

Live stock in state estimated at \$75,000,000—packing plants now building insure a trebled market.

Has two prosperous mining sections, located in the eastern and southern portions of the state—gold, silver, iron, copper and oil among the products.

Has diversity of climates and soils suited to every product of the temperate zone not dependent upon hot nights.

Has active commercial bodies. Ninety-two of them, including this club, compose the Oregon Development League, and you can hear from almost every one by writing one letter to the Portland Commercial Club.

You can visit Portland and other points in Oregon without the cost of an extra cent on any one-way or round-trip ticket that includes a trip to the Pacific Northwest.

Oregon is the checker-board upon which Harriman and Hill are playing the game of modern railroad building, and 1909 will see greater prosperity here than in any other state of the Union.

BARGAINS IN HOOD RIVER APPLE LAND

508. 7 acres 7 miles out on East Side; 4 acres bearing orchard, 12-year-old Spitzenergs and Newtowns, a few odd varieties; creek runs through place; 4-room house, small barn. Price \$5,000. Easy terms.

533. 10 acres 7 miles out on East Side; $\frac{1}{4}$ mile to railway, near school, church and store; all good apple land; 4 acres 1-year-old Spitzenergs, Newtowns and Ortleys; balance of land in clover. Price \$3,700. Easy terms.

538. 10 acres 3 miles out on West Side; all in trees; 1-year-old Spitzenergs, Newtowns and Ortleys; 35,000 strawberry plants; $7\frac{1}{2}$ inches water stock; all fenced with woven wire fencing. Price \$7,500. Easy terms.

3A5. 20 acres 6 miles out on West Side, all unimproved; about 3 acres steep; all timbered. Price \$125 per acre. Easy terms.

509. 20 acres 5 miles out on West Side; 800 4-year-old Spitzenergs and Newtowns, 75 1-year-old Spitzenergs and Newtowns, 50 4-year-old cherries, 30 10-year-old assorted trees; 7-room house, small barn, good well; team, harness, wagon, all farm equipment. Price \$11,500. Easy terms.

2K2. 20 acres $6\frac{1}{2}$ miles out on East Side; 17 acres 5 and 6-year-old Spitzenergs, Newtowns and Jonathans; 3 acres hay; good 6-room house, barn and other outbuildings; 6 inches water stock; all good apple land, on main traveled road and in fine neighborhood. One of the best places in the valley. Price \$20,000. Terms.

544. 20 acres 3 miles out on West Side; 17 acres planted to trees, mostly in bearing Spitzenergs, Newtowns, Baldwins, Kings, Delicious, peaches, pears, etc.; $\frac{1}{2}$ acre strawberries, 1 acre potatoes, all kinds of garden truck; a good 10-room house with water piped through it, also piped to barn and flower garden; a cold storage building of stone, 14x18; all outbuildings; 80 rods to church, 1 mile to school and store; under two irrigating ditches. Price \$18,000. Easy terms.

549. 10 acres; $6\frac{1}{2}$ acres in trees 2 years old, Spitzenergs, Newtowns, Arkansas Blacks and Ortleys; 200 Comice pear fillers, 60 peaches, Lambert and Bing cherries; home orchard of all kinds of small fruits; $2\frac{1}{2}$ acres berries, $1\frac{1}{2}$ acres potatoes; good well. Beautiful new modern 6-room bungalow with bath, furnace, cellar under whole house, large fireplace, wired for electric lights. Price \$6,500. Terms.

451. 40 acres 5 miles out on East Side; 20 acres in trees from 2 to 12 years old, all commercial varieties; all but 4 acres good apple land; near school, church, store and railway station; 6-room house, small barn, all farm tools. Price \$11,000. Easy terms.

We have a special list of bearing orchards that will pay better than 15 per cent interest on the investment, prices ranging from \$1,000 to \$1,600 per acre. These are among the best improved properties in the Hood River Valley. Before investing be sure to see our complete list.

J. H. Heilbronner & Co., Davidson Building, Hood River, Oregon

[The Reliable Dealers]

Hood River, the Land of Opportunity

FIVE REAL BARGAINS

60 Acres Of as fine apple land as is in this beautiful little valley; 40 acres under cultivation. Splendid commercial orchard of 1,315 trees; almost half of this is in full bearing; balance of the 40 acres in potatoes and meadow; 20 acres in timber, light clearing. Abundance of free water from a trout creek on place. New 5-room California bungalow. On main county road, 3 miles from railroad station. Price is only \$15,000; \$6,000 cash, and the apples will pay the balance.

27 Acres 22 acres of which is in solid orchard, strictly commercial, being Newtowns and Spitzenergs, ranging from 1 to 7 years old and all in the very best of condition. A few assorted trees for family use. All kinds of small fruit and berries; 2 acres in potatoes. Seven-room house. In the best orchard district on the east side. Price \$18,000; \$5,000 cash will handle it.

20 Acres 16 acres in prime 4-year-old, strictly commercial orchard; 30 trees 10-year-old family orchard; 2 acres in meadow, balance in timber; creek; good 7-room house, horses, harness, wagon, all implements and tools go with the place. Splendid location, only 4 miles out. Price \$11,500; \$5,000 cash.

10 Acres Ideally located on two roads, right in the heart of the valley. Free water from a trout creek on place. Commercial orchard of 532 trees, 2 and 4 years old; $1\frac{1}{2}$ acres in strawberries between the rows; balance in onions, garden, etc. Five-room house. Price \$6,000; half cash.

34 Acres Volcanic ash soil; 10 acres in young commercial orchard of Newtowns and Spitzenergs in prime condition. Only $3\frac{1}{2}$ miles from the depot at Mosier. This is the biggest snap ever offered in this famous little valley for \$3,500; \$1,000 cash.



FOUR-YEAR-OLD APPLE ORCHARD IN HOOD RIVER VALLEY

DEVLIN & FIREBAUGH

LEADING DEALERS

Main Office:
Swetland Building, PORTLAND, OREGON

Branch Office:
HOOD RIVER, OREGON

BETTER FRUIT

A MONTHLY ILLUSTRATED MAGAZINE PUBLISHED IN THE INTEREST
OF MODERN AND PROGRESSIVE FRUIT GROWING AND MARKETING

ALASKA-YUKON-PACIFIC EXPOSITION AT SEATTLE

JUNE 1 TO OCTOBER 1, 1909. BY GEORGE R. STEARNS

PRESSING the gold nugget on the telegraph key in the White House, President Taft, on June 1, figuratively speaking, rubbed Aladdin's lamp, disclosing to the view of the world such splendors and amounts of pure gold and golden grains and fruits as had never been seen before by the human eye. Apparently, not only had Alaska, the Pacific Coast and the Far East been plundered of their vast storehouses of treasures, but every country on the globe had given up of its valuable paintings, statuary and works of art. "Wonderland," it has been called, and the strict meaning of the name is no misnomer to this great Alaska-Yukon-Pacific Exposition.

No previous exposition has had the scenic environment that is the first remarkable thing to be noticed on entering the grounds at Seattle. All connoisseurs of nature who have visited the Fair readily admit that no future world's fair will ever come anywhere near equaling this one for natural beauty. The buildings are set down in a heretofore unused portion of the University of Washington campus, where, until the advent of the exposition workers, the swing of the axe had been unknown. Wherever possible the towering firs have been spared and the resultant effect—formal classical buildings, ornately stuccoed and myriadly lighted, surrounded and separated by bits of virgin forest—is truly remarkable. The picture is one of the highest civilization and culture set down in the primitive world. No more striking demonstration of the spirit of conservation of resources may be noted than is to be found where many buildings throughout the grounds have been built around trees, that these latter may flourish after the close of the exposition's brief time. To see the tops of tall firs coming through the roofs of amusement palaces, as they do on the exposition's streets for mirth and merriment, and cutting through verandas and porticos of other buildings, should be an effective argument in favor of timber preservation.

The horticultural, agricultural and lumbering exhibits in the different government, state and county buildings, give the comprehensive display of the resources of the Pacific Coast. Alaskan and Yukon countries which they were destined to show, and for which the exposition was intended to inform the entire world.

Second only to the exhibits of the State of Washington is the display of

the State of Oregon in these three industries. Naturally, Washington and its counties have gone into the display of their productive activities to a greater extent than any other state, and only

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DIFFERENT DISTRICTS

six years ago Oregon held the Lewis and Clark Exposition.

Oregon has departed from the usual colors in decoration for the interior of its building, and has the walls in black, which gives to the visitor as he enters

a vivid picture at one glance of the horticulture, agriculture and finished lumber products, and also a good idea is gained of the scenery and topography from the large pictures which hang about the walls. About the great dome of the building is the star special attraction, the magnificent imitation mosaic tapestry, 150 by 20 feet, picturing in natural colors an orchard scene, a farming view, a forest and lumbering scene, the Columbia River and beautiful Multnomah Falls. Imitation mosaic, because everything used in this exceptional piece of art work is from the farm, the orchard or the forest. The larger part of it is worked out in grains, grasses and seeds. For the water color, spurry seed was used; the coloring of the sky is made by the use of clover and millet; the red of the rooster's comb is red pepper pods. A standing offer of twenty dollars in gold to anyone who can discover any paint used in the panorama has never had to be forfeited.

About a cone of apples, twenty-seven feet in height and ten feet at the base, and occupying the center of the building, is the horticultural exhibit. Fresh and preserved fruits of every kind raised in the state are to be seen. Apples are the specialty. Oregon, every county being represented, sent two thousand boxes of apples for exhibition purposes; and that a fresh supply might always be on hand those not on display are in a refrigerator, the temperature of which is kept



Photo by F. H. Nowell. Copyright 1908

Engraved by Hicks-Chotten Co., Portland, Oregon

GEYSER BASIN. ALASKA-YUKON-PACIFIC EXPOSITION



Photo by F. H. Nowell. Copyright 1908

Engraved by Hicks-Chotten Co., Portland, Oregon

SEATTLE, WASHINGTON. PUGET SOUND. OLYMPIC MOUNTAINS IN DISTANCE, SHOWING SNOW-CAPPED RIDGE

at 32 degrees. Included in the exhibit about the great cone of apples, is the display of nuts which are raised in Oregon. It is not generally known that the Beaver state has such a large variety of nuts, and especially that they have almonds. The different vegetables and the grains are to be seen here.

Near the horticultural exhibit is an old-fashioned cider press in operation, with the apples being placed in one end and the delicious cider coming out the other end. Across from this is a mon-

ster beaver covered with prunes, and nearby a sheep covered with one ton of fleece taken from sheep which graze in the state. There are a number of other devices which bring forcibly to the minds of the people who enter the building Oregon's products.

Passing hurriedly over the excellent fisheries exhibit containing all kinds of live fish found in the waters of the state, the dairy exhibit with its refrigerator containing a model in butter of a farm and a farmer girl busily engaged in milk-

ing a cow, the lecture room where illustrated half-hour lectures are given, the ladies' rest room finished entirely with Oregon lumber and furnished with Oregon furniture, the section devoted to county manufactures and the educational work, taxidermy of every known animal and bird which inhabits the state, we come to a feature which is unique in exploiting the productiveness of a state, and this is the restaurant.

Oregonian commissioners argued that the pathway to a man's heart and reason

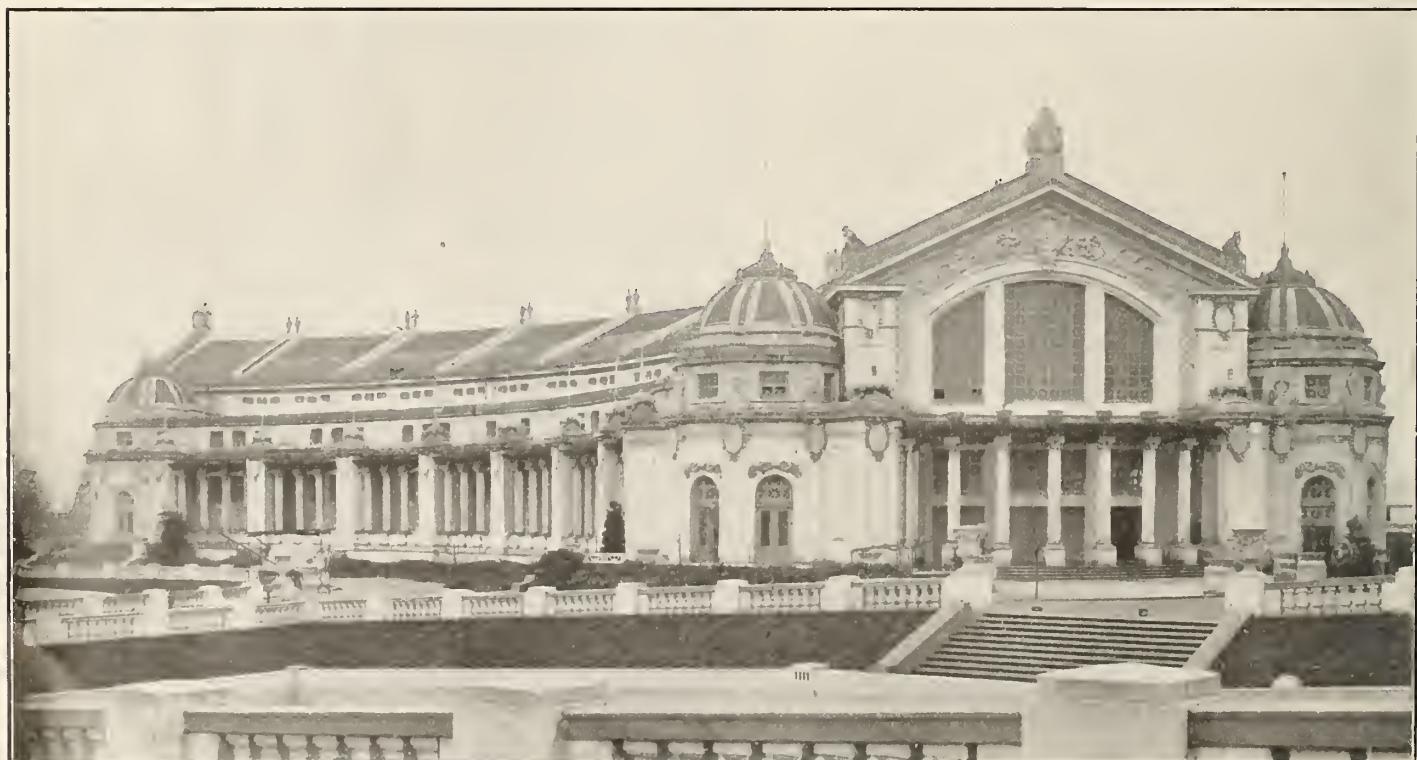


Photo by F. H. Nowell. Copyright 1908

Engraved by Hicks-Chotten Co., Portland, Oregon

PALACE OF AGRICULTURE, HORTICULTURE AND FLORICULTURE, ALASKA-YUKON-PACIFIC EXPOSITION

was through his stomach; they therefore decided to feed him. Only meats, vegetables, fruits and other foodstuffs from the state of Oregon are served here, and the price paid for a meal is just enough to cover the cost and is very reasonable. A souvenir menu is given each diner to carry away with him. Below the name of each article of food which is on the bill of fare is the name of the county from which it came.

Flowers and shrubbery native to the Beaver state are seen in profusion about the grounds and buildings.

buildings for a more extensive display of the lines along which their activities lie. Washington state building is the scene of many brilliant functions almost daily, and many informal affairs have been held during the past weeks, and the place will continue to be a prominent one in the social life on the grounds. The building was built for entertaining visitors at the fair, and it is fulfilling its mission in a pleasing manner.

To do justice to the Washington state exhibit would be to go into particulars of the displays in each county booth

immense amount of wealth to the state, and thus in the section devoted to the State of Washington nearly, everything of commercial value which is found in the United States is also found here.

The Rome Beauty, Jonathan, Wagner, Northern Spy and Spitz, well known commercial apples of the finest quality, are shown in the Washington county booths, as are also numerous other varieties raised more for home consumption or for experiment. Those named, with perhaps a few others, have been found to net the most profit and have proved



Photo by F. H. Nowell. Copyright 1908

LOOKING DOWN YUKON AVENUE. ALASKA-YUKON-PACIFIC EXPOSITION

Engraved by Hicks-Chatten Co., Portland, Oregon

Lack of space prohibits the going into detail of the large exhibits from the State of Washington, which are distributed in many different buildings. The entire west half of the large agricultural building which fronts on the beautiful cascades, is given over to separate booths for every county in the state. A walk along them gives a comprehensive idea to the visitor of the productiveness of the state, including horticulture, agriculture, lumbering, mining, manufacturing, fishing and the innumerable other industries which have already gained large proportions in the eyes of the commercial world. Spokane, King, Yakima and Chehalis counties have separate

and also in the county buildings, but, as already stated, the length of this article will not permit of doing this. Whoever visits the exposition visits the agricultural building, and they are at once attracted by the one-half of the building which is finished in hewn fir in its natural color. To give a general outline of this section will have to suffice.

The soil and climate of the State of Washington has been found to be such as will profitably produce nearly every grain, fruit and vegetable known. Her minerals rank high among her sister states, and from her fisheries millions of dollars are derived annually. The mining and lumbering industries give an

the best for shipping purposes in car-load lots. Pears of the Bartlett, Flemish Beauty, Anjou, and other varieties not so commonly known, are found both in the preserved and fresh state.

Although California and Oregon have larger displays of prunes than are to be found in the county booths of Washington, still there is a good display of the Italian and Oregon or Dutch prune and the varieties which have become staple in the state. The exhibit of cherries includes Royal Ann, Bing, Lambert and Dukes, varieties which are those most generally grown for the market.

Berries of almost every domestic kind have been grown or are being tested out

in the state. Strawberries, raspberries, blackberries, of good size and which have been proved of good quality, are shown. There are numerous other fruits in liquid and also fresh. Some of the commissioners have arranged with their respective counties and are supplied from time to time with the fresh fruits, as the booths lacked the room necessary for installing a refrigerator system.

Nearly every county raises some grains for shipping, and nearly every county has its decorations about the booth worked in grain panels or sheaves of grain on the walls. Barley, wheat, oats, rye and the grasses, timothy, clover, red top, alfalfa, are products of practically all the counties. Spokane, for instance, has a display of between sixty and seventy varieties of grains which have been grown in that county. Some of these, it is true, are only in the experimental state as yet. The majority of the booths have from twelve to fifteen varieties of grains which have proved to be good producers in their localities.

Vegetables, including melons, potatoes, cucumbers, carrots, celery and the numerous others which in proportion bring money to the garden men and the farmers of the state, are to be seen.

Finished lumber products, educational features, fisheries, minerals, flowers, etc., are to be seen in the Washington state booths. Each booth has carried its own idea of decorating out to the smallest detail. Walla Walla, for example, has the walls covered with red burlap made in the penitentiary. Breaking up the space between the display of products



Photo by F. H. Nowell. Copyright 1908

Engraved by Hicks-Chatten Co., Portland, Oregon

HANDSOME ENTRANCE TO AGRICULTURAL HALL. ALASKA-YUKON-PACIFIC EXPOSITION

are large bromide photographs of scenes in the county. Manufactured products of the counties also make up a large part of the exhibits.

The separate buildings of King, Spokane, Chehalis and Yakima counties naturally give a much more detailed display of their specialties in the world of commerce, and these counties can go into

the entertaining of their guests to a larger extent than otherwise. The four buildings are attractive both outside and inside. The grounds about them have been made to show off the beauty of the building as much as possible and add to the natural beauty of the whole exposition.

Idaho has not as large a building as Oregon, but the exhibits give a good, compact idea of the state's products and activities. The exterior walls of the building are almost entirely covered with vines and trellises. The style of the building is of the old Moorish and harmonizes well with the old Mission style of the California building directly across from it. On both sides of the broad stairs leading up to the veranda and about the veranda are boxes of delicate and fragrant flowers in bloom, with the syringa, the state flower, predominating. The scheme of decoration for both the exterior and interior of the building is white and yellow. Six bay trees are used at night at the entrance of the building as electrolriers and produce a pleasing effect.

Some idea of the great diversity of the Idaho exhibit may be gained when it is remembered that the state extends from British Columbia to Nevada and is over seven hundred miles in length, running the whole distance of both Washington and Oregon. Having a climate which, for variety, is similar to that in the eastern part of these states, and also of the states which border it on the east and south, Idaho has a truly wonderful list of products. Mining and lumbering are carried on extensively and products from these sources form a large part of the display. It is needless to enumerate the different kinds of fruits, vegetables and grains grown in Idaho, as they are practically the same as have already



Photo by F. H. Nowell. Copyright 1908

Engraved by Hicks-Chatten Co., Portland, Oregon

AN ENTRANCE TO THE FOREIGN BUILDING. ALASKA-YUKON-PACIFIC EXPOSITION

been mentioned as coming from Washington or Oregon.

The Idaho commissioners have some very pleasant rest rooms and small dining rooms, with the tables and chairs in white and yellow, which gives a dainty appearance to the rooms. Numerous affairs are given in the reception rooms by the hosts and hostesses, which are adding to the general gaiety of the life about the grounds. The entertaining feature at the exposition has become very prominent through the work of Seattle and visiting ladies. New York, Utah, California, and in fact, at all the buildings which have reception rooms or the outside grounds arranged for this feature, society is coming in for its share of recognition. On days when the governors of the different states are present and on state days the entertaining is on a much larger scale.

Alaska, the Pacific Ocean possessions, and the countries of the Far East have large exhibits of horticulture and agriculture products, which are attracting considerable attention. Alaska is probably attracting more attention than any other for the variety of its products. This great 500,000 miles of north land, which in many minds has always been considered a land of ice and snow with a large sprinkling of valuable mineral deposits, is showing to the thousands of visitors that it can raise vegetables, grains and fruits on the rich soil which it contains. Although these products have not yet attained commercial proportions, there is every reason to believe that in time to come they will become commercial products. Standing nearly in the center of the Alaska building is the gold booth, in which is a display of one million dollars worth of nuggets, bricks and dust. Ten times this amount was offered to the Alaskan commissioner by mine owners, but it was believed that



Copyright by W. P. Romans

Engraved by Hicks-Chatten Co., Portland, Oregon

AUDITORIUM, ALASKA-YUKON-PACIFIC EXPOSITION. A PERMANENT BRICK AND STEEL STRUCTURE THAT REVERTS TO THE UNIVERSITY OF WASHINGTON

the amount which they did take would be sufficient to bring forcibly to the minds of the people the fact that Alaska is the second largest gold producing country in the world, Africa only exceeding in the value of the gold output. The value of Alaska fisheries is second only to the gold produced, and the exhibit of the salmon fishing industry is made on a scale commensurate with its importance. Besides the canning factory in operation, the fish cleaning machine and the other departments in this branch of work, is a restaurant, where gratuitous meals are served at both a lunch counter and dining room. The number of different dishes which can be made from salmon surprises the

majority of people who have tasted the delicacies.

The Hawaiian and Philippine buildings open up to the uninitiated a source of information concerning the ability of those countries to help supply the world with food, clothing and wealth. The United States and the people of their own lands have combined to give every line of raw and manufactured products its place in the exhibit.

As oft as steamships arrive from the far-away countries exhibiting at the fair they bring with them fresh supplies of products which, on account of being raised in a country differing considerably in climate, do not keep well. There is a supply of vegetables, fruits, flowers, etc., in liquid.

The Livestock Show, which opens on September 27 and continues until October 9, has already begun to attract exhibition animals here, and many foreign breeders of prize cattle are making arrangements for showing during the period. There is no better place than the Pacific Coast for disposing of stock, and the breeders knowing this are making every effort to bring their finest stock here. Canada has appropriated \$1,500 for transporting stock to Seattle, and this shipment will be exhibited by the Cattle Breeders' Association of Manitoba.

Prizes to the amount of \$10,000 have already been put up, and this will be further increased by the cattle associations over the country. The American Short Horn Cattle Breeders' Association of Chicago, and the Aberdeen-Angus Cattle Breeders' Association have signified their intention of giving \$2,500 and \$1,000, respectively. The prizes will consist of cups, medals and cash.

Something should be said of the flowers and shrubbery with which the grounds are covered, and which have been blooming and will continue to be in flower during the entire exposition period. The cactus dahlia was chosen as the official flower of the exposition.

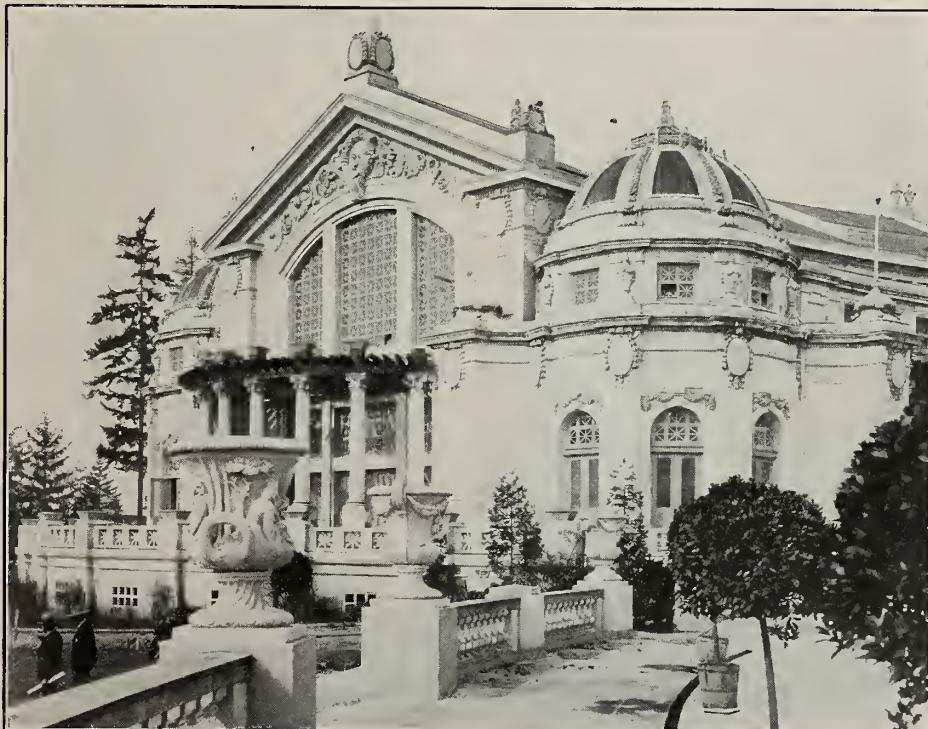


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END OF AGRICULTURAL BUILDING, ALASKA-YUKON-PACIFIC EXPOSITION

and about ten thousand are planted about the grounds. There are twenty-five thousand geranium plants, many thousands of pansies and hundreds of other plants which add delicate colors to the whole fairy garden. There is an amount of oriental shrubbery in the Japanese gardens near the Rising Sun's building. About the different state buildings the particular flowers which are native to that state are to be seen in profusion.

At night the grounds are a blaze of light from the million of eight-candle-power incandescent globes which are to be found scattered over the entire exposition. People feel that they have not seen the exposition until they have had the pleasure of seeing it at night. On the buildings, down the cascades, in the gardens and among the trees of the outer part of the grounds, the "fireflies" shine out. Down the cascades there is plunging every minute forty thousand gallons of water, over a series of dams. At the lip of each dam heavy hoods protect powerful lights behind glass of the primary colors. The shading is from the lighter tones in the center to the darker tones on the outside, and a magnificent effect is the result when lighted.

The wild game preserve, although not as large as anticipated, embraces an area of ten acres of ground, located on the shores of Lake Washington. The land within the enclosure has been left in its wild condition. The collection of specimens includes nearly every wild animal to be found in the state and the far North. There are a few animals from the far East also.

Even were there no colored lights, signs and other things to point the way to "Pay Streak," every visitor would land there in the end, from curiosity if nothing else. On entering the exposition at the main entrance, the sounds of laughter, amounting to shrieks, the

weird horn and beating of tomtom, the call of the "barker," the sounds of singing and of apparent firing of many rifles or gatling guns, and coming at a greater distance and more gently is the sound of music produced by stringed instruments—all these varied sounds strike the ears of those who enter the grounds, and that indefinable something in everyone's

and the Merrimac, Streets of Cairo and Turkish Village, all these features bring enjoyment and laughter and go to make good red corpuscles which are necessary to health and happiness. Many of the features on "Pay Streak" are educational besides being fun producers. Some of these give a better conception of the life, pleasures and pursuits of unknown peo-



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ALASKA-YUKON-PACIFIC EXPOSITION. HAWAIIAN BUILDING

nature draws them down to "Pay Streak" "just to see what's there."

We have been called a pleasure loving world, and there is no use denying it, the majority of people like to get out and have good clean fun—and they get it on "Pay Streak." The House Upside Down, Scenic Railway, Figure Eight, Dixie Land, The Battle of the Monitor

ples than a volume of written matter would ever bring to the mind of the reader.

In the Eskimo Village there is an education to be gleaned from viewing these people at play and at work. The same may be said of the Igorrote Village, with its numbers of brown head-hunting people. There are also the Chinese and Japanese villages, the biggest thing of the sort ever undertaken in America. On the shores of Lake Union is a United States government life-saving station which is proving an interesting attraction. This is at the foot of the amusement street. There is a submarine boat which gives an exhibition of its capabilities as a war craft. A number of gondolas, imported from Venice and propelled by Venetian gondoliers, are another attraction which is proving popular. A number of other entertainments for a moderate price are to be found which will give amusement without any bad flavor left in the system after seeing them. The exposition authorities have been very careful in that particular.

♦ ♦ ♦

THE International Shippers' Association will hold its annual meeting at Buffalo, New York, with headquarters at the Iroquois Hotel. The sessions will extend over August 4, 5 and 6. The officers of the association extend a cordial invitation to Northwestern fruit men to be present. Every one connected with the fruit industry, and who can possibly get away from his orchard work, ought to attend this meeting of the shippers' association.



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OREGON STATE BUILDING. ALASKA-YUKON-PACIFIC EXPOSITION

TREATISE ON POLLINATION OF APPLE BLOSSOMS

BY C. I. LEWIS AND C. C. VINCENT OF OREGON AGRICULTURAL COLLEGE EXPERIMENT STATION, CORVALLIS, OREGON

IT was not until the close of the last decade that the significance of pollination of apple and pear blossoms came into prominence. Through the efforts of M. B. Waite, in the United States Department of Agriculture, intel-

careful observations noted differences in the action of pollen on the same and another flower. Darwin's work, "Variation of Animals and Plants under Domestication," suggests many interesting lines of original research work, and

the lack of setting of fruit, have led to investigations on this problem by this department, some of which are reported in this bulletin.

Method of Emasculation

Anyone contemplating the carrying on of pollination experiments must have a thorough knowledge of the parts of a flower before a high degree of success can be obtained. Next, it is necessary to learn the operation of emasculation, which consists in removing the anthers from the flower. The object of this process is to prevent self-pollination. To remove these anthers in the best possible way is a serious question with many investigators. At this station, the writers have received excellent results by the use of the method outlined below, and have made from six hundred to one thousand emasculations per day. In carrying on work of this nature rapidity as well as efficiency must be sought.

Method.—Grasp the blossom with the thumb and forefinger of one hand and grasp the tips of the petals with the thumb and forefinger of the other hand (Plate 1), then, by simply giving the wrist a quick upward or downward movement, the petals can be easily detached from the blossom (Plate 2). Now, with one or two quick movements with the scissors (Plate 3) the anthers are removed and the pistils are ready to receive the pollen (Plate 4). After the application of pollen is made, the emasculated blossom is enclosed within a bag (Plate 5) and allowed to remain until fecundation has taken place and all danger from the action of foreign pollen is over. After every pollination label each bag in such a way that there will be no question as to what variety of pollen is used. As the apples approach maturity it is essential that they be enclosed in cheesecloth bags. This protects the fruits from being picked accidentally. The object in removing the petals is to tell just where to make the cuts without injuring the other parts of the flower. Since this greatly facilitates the method



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MACHINERY HALL, ALASKA-YUKON-PACIFIC EXPOSITION. ONE OF THE PERMANENT STRUCTURES WHICH WILL REVERT TO THE UNIVERSITY OF WASHINGTON

lignant light was thrown upon this important question.

As far back as 1793 the importance of insects in pollination was impressed upon the minds of many investigators, and Mr. Sprengel, a German writer, published a book entitled, "The Secret of Nature in the Form and Fertilization of Flowers Discovered," which proved to be an effective stimulus for future work upon this interesting study.

While Sprengel's work was practically forgotten, other investigators were making acute observations on the cross-fertilization of flowers, which completely overthrew the theory advanced by Sprengel, of the independent creation of species. Not long after Sprengel's book appeared, Andrew Knight carried on some very interesting experiments on the cross and self-fertilization of the pea, and arrived at the conclusion that in no plant does self-fertilization occur for an unlimited number of generations.

But it was not until after the appearance of Darwin's "Origin of Species" that Knight's theory was emphasized as a general law of nature. At this time the real value of Sprengel's work was realized and his discoveries opened up new paths for investigation, especially along the lines which were to determine the forms of flowers.

In Darwin's "Origin of Species" cross-fertilization was emphasized, but no special significance was attached to this discovery until the appearance of his second work, entitled, "Various Contrivances by which British and Foreign Orchids are Fertilized by Insects." When summing up his work he states, "Nature abhors perpetual self-fertilization." Not content with these results, he explored new lines of investigation, and from his

from these suggestions experimenters have branched out into new fields of investigation.

It was largely through the efforts of Darwin that Waite carried out the experiments outlined in his bulletin, "The Pollination of Pear Blossoms." Since then many investigators, such as F. A. Waugh, S. A. Beach, C. P. Close, M. M. Munson, S. W. Fletcher, U. P. Hedrick, and many others from the agricultural colleges in the United States, have worked on pollination problems. Likewise H. Mueller-Turgau, O. Kirchner and Dr. Ewert, of Europe, have also carried on many investigations and experiments on this subject. The many reports sent into this station from various parts of our state, complaining of



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ALASKA-YUKON-PACIFIC EXPOSITION. SCENE ALONG THE COURT OF HONOR TEN WEEKS BEFORE THE OPENING DAY



PLATE I.—FIRST STEP IN EMASCULATION

of emasculating, it may serve as an impetus for greater work along this line.

Several methods of emasculating the blossoms are used by different investigators throughout the United States.



PLATE II.—REMOVING THE PETALS

Waite, of the Department of Agriculture, removes the corolla with the aid of a small sharp pair of scissors, leaving the emasculated blossom as seen in

BETTER FRUIT

Plate VI, Figure 1. Others have been fairly successful in using a sharp scalpel to perform the work. We have found that in every case when the sepals were removed with the petals, it caused a malformation of the apple, as shown in Plate VII, Figure 1. Figure 2 shows normal apple when sepals are unmolested.

It is evident that emasculation must be skillfully done, for the slightest mutilation causes a malformation of the calyx end of the apple. When the sepals were not injured in any way a large per cent of the emasculated blossoms set fruit. Plate VI, Figure 1, shows the wrong way of emasculating, and Figure 2 the correct way of emasculating. The method of removing the blossoms as outlined by the writers leaves the sepals in perfect condition, with the fruit unharmed.

Collecting Pollen

One of the greatest problems the plant breeder has to meet, is the collecting of an adequate supply of pollen for work on a large scale. It is evident that where many of our leading varieties blossom together, pollen must be gathered in sufficient quantities beforehand, if extensive experiments in cross-pollination are to be carried on.

Since this is the case, means must be provided by which the blossoms can be forced. To accomplish this, a forcing house is very desirable, although for work on a small scale any house having quite a few windows on the south side would answer the purpose. The following picture (Plate VIII) shows a house that has given satisfaction at this station.

Selecting Twigs.—Small twigs, from ten to twenty inches in length, having from three to six clusters of blossoms, are gathered from the variety which is to be used as a pollinator and taken to the forcing house. First, all the open blossoms are removed from the twigs,

which are then placed in jars of water and properly labeled, then covered with hoods so as to prevent the transfer of pollen by insects.

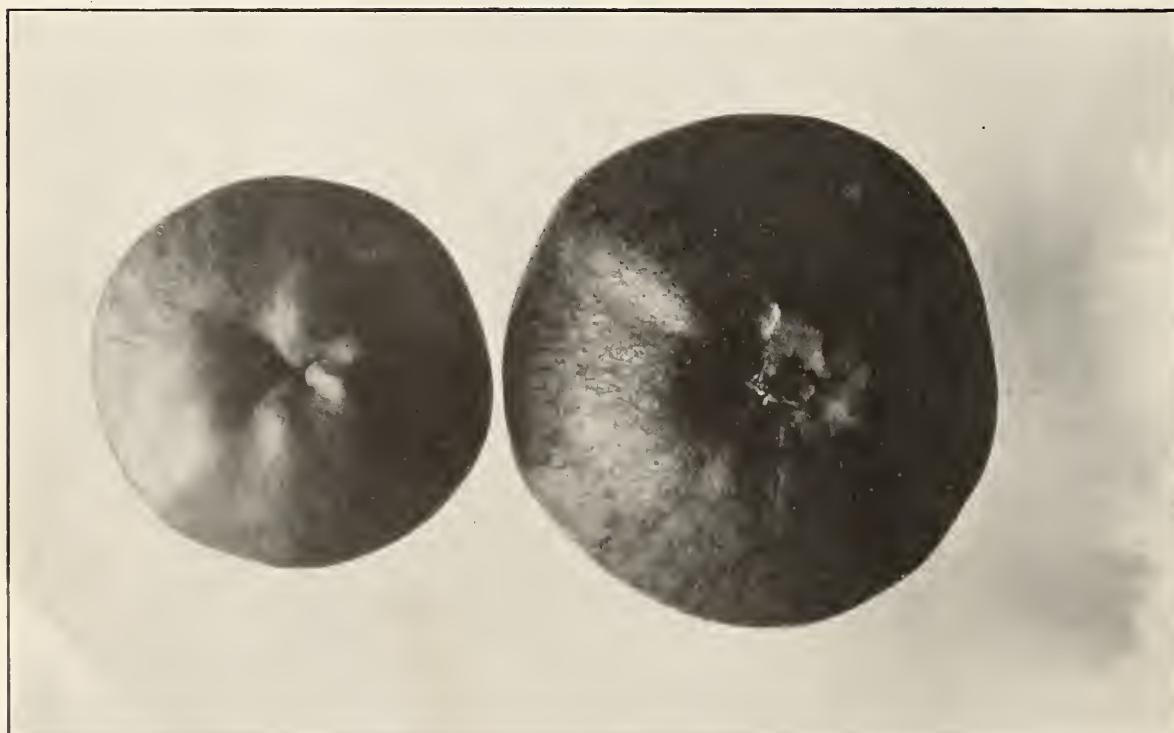
Usually the twigs are placed in the forcing house a week or two before the trees come into blossom. If the weather is good the blossoms will open in three or four days. If, however, it is desired



PLATE V.—METHOD OF BAGGING THE BLOSSOM

to obtain quicker results, it can very easily be accomplished by using warm water in place of cold water. By splitting the stems of the different twigs the blossoms can be forced open from three to four hours earlier. In the experiments carried on, a gain of from one to two days was realized by the use of warm water and the splitting of stems.

After the anthers dehisce and the pollen becomes ripe, a small vial, properly labeled, is used to collect the pollen. By removing the hoods the pollen can be very easily dusted into the vials with the aid of small camel's hair brushes. Plate IX shows the vial, properly labeled and plugged with cotton, which is used by the writers to carry the pollen to the orchard. In these vials the pollen will keep until ready for use, if sufficiently dried. If it is not dried enough, fermentation will set in quite easily. Very gratifying results have been obtained by collecting the pollen in this manner. At the present

PLATE VII.—FIGURE 1. MALFORMATION, CAUSED BY CUTTING SEPALS WHEN EMASCULATING
FIGURE 2. NORMAL APPLE, AS A RESULT OF ALLOWING SEPALS TO REMAIN

time it is not known just how long pollen can be kept before losing its viability. At this station good results have been received from pollen that had been gathered three weeks.

One of the simplest ways of procuring pollen is to cover with paper sacks branches that are nearly in flower, and the ripened anthers from these blossoms



PLATE VI.—FIGURE 1. IMPROPER EMASCULATION, SEPALS BEING INJURED.
FIGURE 2. PROPER EMASCULATION, SEPALS INTACT

can be used for pollination purposes. Another method is to put in a warm room unripe anthers from flowers about to open. In a few hours the anthers will dehisce. Many pollenizers use this method in cases of emergency. Perhaps the most popular way of collecting pollen is to pick off the unopened buds, remove the anthers and let them dehisce.

After trying some of these methods outlined we decided that better results could be obtained by the use of the forcing house. In a small house, twelve by fourteen feet, containing from twelve to thirty jars of blossoms, sufficient pollen can be gathered to carry on very extensive experiments in cross-pollination.

Applying Pollen to the Pistils

How to Apply.—We have found that the quickest and most effective way of applying pollen to the pistils is by the use of a small, pointed camel's hair brush, having a handle from six to eight inches long. (Plate IV.) While in this way more or less pollen is wasted

in making the application, nevertheless the disadvantages are greatly offset by the advantages. Brush pollination is very effective, also allowing for great rapidity, and when a great many thousand blossoms must be pollinated is the most practicable method used. The simplest way of applying pollen is to touch the stigma with a dehisced anther. Another method is to dip the thumb or forefinger in the pollen and then transfer to the stigma of the pistil.

When using the camel's hair brush too much care cannot be exercised in making the application. Enough pollen should be placed on the stigma so that it can be readily perceived. In all cases each kind of pollen for each variety pollinated must have its own brush if scientific results are to be obtained. By sterilizing the brushes they can be used over and over again.

When to Make Application.—There appears to be considerable controversy as to the best time of applying the pollen to the pistils. The indications are that much depends upon the maturity of the buds whether or not a pistil is receptive at the time of emasculating. The receptiveness of the pistil is also influenced by such elements as climatic conditions, vigor and age of tree, variety, condition of soil and general care of orchard.

The paramount question to settle is whether better results can be obtained by applying the pollen at the time of emasculation or waiting until the pistil is receptive. From the deductions made of the work carried on by this station, excellent results have been obtained by applying the pollen to the pistil as soon as the blossom is emasculated. However, this may have been due to the fact that the blossoms operated upon were those that would probably open under normal conditions in one day from the time the operation was performed.



PLATE III.—REMOVING THE STAMENS



PLATE IV.—APPLYING POLLEN TO THE PISTILS

that nature encourages cross-pollination rather than self-pollination. One of the greatest advantages of pollinating at the time of emasculating is the saving of



PLATE VIII.—SHOWING METHOD OF FORCING BLOSSOMS FOR POLLEN PRODUCTION. THE HOODS PREVENT INTRODUCTION OF FOREIGN POLLEN BY INSECTS



PLATE IX.—SHOWING METHOD OF COLLECTING AND TRANSFERRING POLLEN

time, as the bags will not have to be removed.

There are many plant breeders that do not make the application until two or three days after the blossoms have opened. These men have also received very satisfactory results. Professor S. W. Fletcher, of the Virginia Agricultural College, usually waits until the stigma of the emasculated blossom glistens before making the application. Many other investigators pursue the same method. By consulting Tables IV and VII the percentages of successes of the two methods can be readily seen.

Pollen Transmitted Through the Air.

It has been a question in the minds of many experimenters for some time just how much the wind aids in carrying pollen from tree to tree. If the wind does aid in distributing pollen, is it distributed in sufficient quantities to insure the fertilization of the ovules? Since so many of our varieties of apples are known to be self-sterile and must depend upon foreign pollen for fertilizing the ovules, this question is of serious consequence. Is it the wind or our common honey bee that does the work? From the observations made the past two years it is evident that bees play an important part in the fertilization of the blossoms. To arrive at some definite conclusions as to how much pollen is transmitted through the air by the wind, experiments were carried on to determine this question. Waugh, of Massachusetts, demonstrated that plum pollen was not transmitted through the air in sufficient quantities to insure cross-pollination. To substantiate his statements the authors carried on some experiments with plums, as outlined by him.

BETTER FRUIT

To determine whether apple pollen was carried through the air by the wind in sufficient quantities to insure cross-pollination, experiments were conducted in the following manner. Small glass slides, one by three inches, were smeared with vaseline and placed at different distances and at different heights from certain large trees in the orchard. In this case, two of the largest trees in the orchard, the Rome Beauty and the Mammoth Black Twig, were selected. After an exposure of twenty-four hours the slides were taken to the laboratory and examined under the microscope. The following indicates results obtained:

TABLE I.—SHOWING DISTRIBUTION OF POLLEN BY WIND

Slide Number	Distance from trunk of tree	Height of slides	Number of pollen grains
1	4 feet	On ground	16
2	12 feet	6 feet	9
3	15 feet	4 feet	11
4	15 feet	6 feet	8
5	20 feet	9 feet	6
6	30 feet	6 feet	7

During the experiment a strong north wind was blowing and the trees were in the height of their blooming period. The conclusion to be drawn from this experiment is that the wind cannot be relied upon as an agency to transfer pollen from tree to tree throughout the orchard.

To verify our last experiment the following work was carried on: A seven-year-old tree containing 1,500 blossoms was emasculated and left exposed to the wind and insect visitation. The object of this experiment was two-fold: First, to determine if pollen was transmitted through the air in sufficient quantities to insure cross-pollination; second, to determine if removal of the floral part of the blossom would affect the visits of insects. The tree operated upon was located twenty feet from another tree that blossomed profusely. It is generally conceded by many experimenters that the honey bee is attracted

to the blossom by the inflorescence. The results obtained will be a fair index as to the truth of this statement. Out of the fifteen hundred blossoms emasculated only five set fruit. During the whole period that the pistils of these blossoms remained receptive only eight bees visited the tree. More than twice that number were seen in one half-hour on the tree twenty feet away. Since only a small portion of the emasculated blossoms set fruit, it is manifest that pollen is not transmitted through the air in sufficient quantities to insure cross-pollination. While this experiment demonstrated the fact that bees will visit trees when the floral part of the blossom is removed, they are not attracted in sufficient numbers to insure perfect pollination. It is apparent that the showy petals of the blossoms aid materially in attracting the bees. The blossom is well supplied with nectar, and the open character of the nectary makes it accessible to almost all insects. The bees, in trying to reach the nectar, brush against the anthers and carry away with them on their hairy legs and abdomen large quantities of pollen. The insects in visiting



PLATE XI.—EMASCULATING AND BAGGING BLOSSOMS



PLATE XIII.—BLOSSOMS READY FOR EMASCULATION
This should always be done before the petals unfold. However, when possible emasculation should be delayed until the petals are nearly ready to open.

other blossoms transfer some of the foreign pollen to these pistils. Since the wind aids so little in cross-pollination it is evident that the various insects, especially the bees, are carriers of pollen.

As the assurance of a crop depends upon insects as distributors of the pollen, it is necessary that apiaries be established in the different fruit sections. With favorable climatic conditions and proper planting of varieties the bees would insure pollination.

Self-Sterile and Self-Fertile Varieties

A knowledge of the sterile and fertile varieties is essential in pollination work before any definite investigations can be conducted. A sterile variety is one that will not fertilize its ovule with its own pollen, while a fertile variety is one that will perform this function. Since investigators have found that climatic conditions influence greatly the sterility and fertility of a variety, it is doubly important that this experiment be demonstrated in every locality, especially when a wide variance is found in the climate. Eastern conditions are hardly applicable to those found in the West.

The method usually followed to

ascertain this question was to inclose the blossoms in cloth or manila bags before they opened, thus removing all danger of foreign pollen from insect visitation. After blossoms open and the anthers expand the pollen is scattered on the several stigmas, and if the blossoms set fruit it is evident that the variety is self-fertile, but, on the other hand, if the pistil shrivels and dries up it is sufficient evidence that the variety is self-sterile. For this experiment it is very important that the right branches be selected. Outside branches should be chosen, as they are more favorably situated. In every case all the open blossoms should be removed before sacking. Too much stress cannot be placed upon this important question if accurate results are to be realized.

In 1907 three grades of bags were used, namely, the manila paper bag, the fine and the coarse cheesecloth bags. Since inclosing blossoms in bags is subjecting them to unnatural conditions, these three styles were selected in order to detect, if possible, any difference that might arise in the setting of fruits. As the effectiveness of the three bags was the same, in 1908 we confined ourselves to the manila bags.

(To be concluded in August edition)

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SOME prospective orchardists fear the orchard business is being overdone, on account of the large acreage being planted in the Northwest. This is a groundless fear. There is no danger of

overproduction, for each year ten times greater acreage of old orchards is abandoned in the East than is planted in the Pacific Northwest.

The consumption of apples in the world is yearly increasing, as the population is increasing, as wealth and civilization are increasing.

Figures gathered by the United States Department of Agriculture show a steady decrease in the production of apples. Each year thousands of Eastern orchards are abandoned to the San Jose scale, to the codlin moth, to the woolly aphid, to the blight and the myriad other pests that prey upon the apple. Each year the frost ruins a large percentage of the crop.

The farmer apple-grower is going out of business. In his place reigns the scientific commercial orchardist. Climatic and soil conditions render his occupation a hazardous one in the East, a sure success in the Northwest, hence the Northwest is the orchard of the future.

In 1896 the apple crop was approximately sixty-five million barrels. In 1908 the apple crop was only twenty-three million, showing a decrease of forty-two million barrels in twelve years. The following figures prove the gradual diminution of the total output, proving the improbability of an over-production. These figures, if compared with those of the twelve years previous, will also show diminution:

In the year 1896, 69,070,000 barrels; 1897, 41,536,000 barrels; 1898, 28,570,000 barrels; 1899, 37,560,000 barrels; 1900, 47,960,000 barrels; 1901, 26,970,000 barrels; 1902, 47,625,000 barrels; 1903, 45,000,000 barrels; 1904, 45,300,000 barrels; 1905, 23,500,000 barrels; 1906, 38,000,000 barrels; 1907, 29,000,000 barrels; 1908, 23,000,000 barrels.—Medford Tribune.

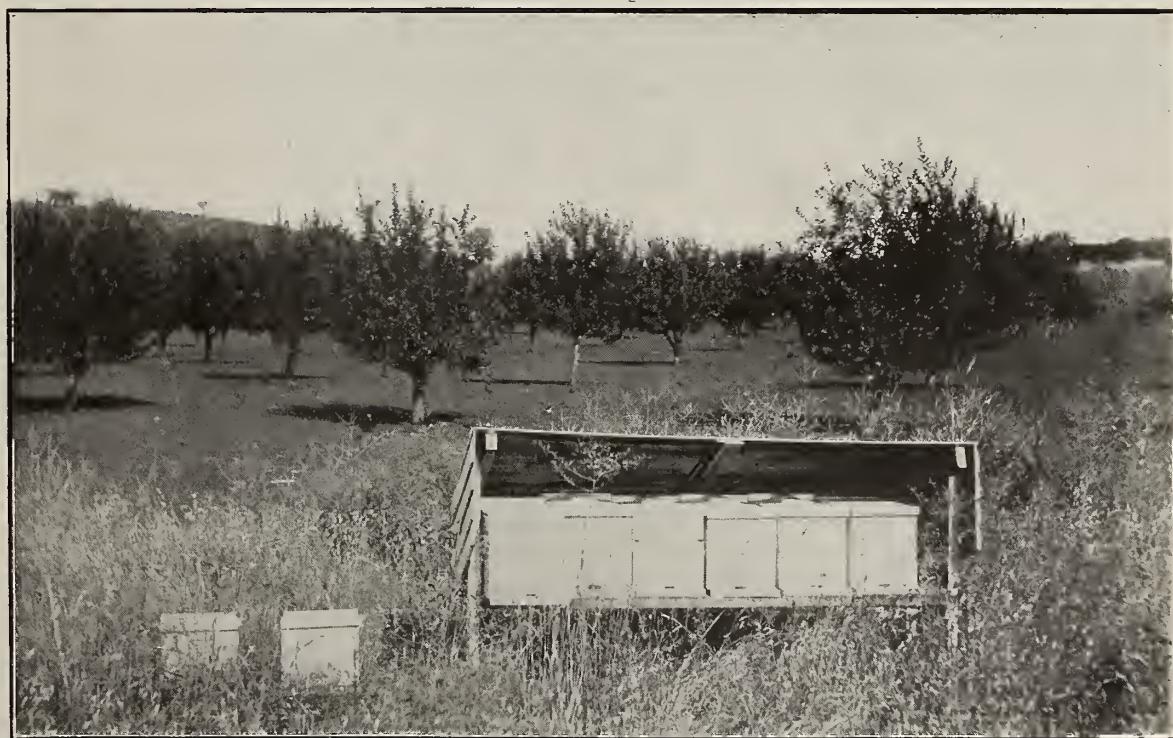


PLATE X.—APIARIES SHOULD BE KEPT IN ORCHARDS, AS THE BEE IS THE BEST AGENT FOR CROSS-POLLINATION

IRRIGATION CONGRESS AT SPOKANE, AUGUST 9 TO 14

BY AUGUST WOLF

RECLAMATION of arid and swamp lands will have a prominent place on the program now in preparation for the National Irrigation Congress which will have its seventeenth session in Spokane, Washington, August 9 to 14. George Eames Barstow of Texas will preside, and it is expected there will be from 4,500 to 5,000 accredited delegates from various parts of the United States and representatives from Canada and Europe, the South American republics, China and Japan. President Taft and members of his cabinet, also officials of the reclamation and forestry services, and other branches of the Department of Agriculture; bankers, railroad presidents, and experts in forestry, reclamation work, deep waterways, good roads and home building will participate in the deliberations.

Among the speakers will be Gifford Pinchot, chief of the forest service; United States Senator Cummins of Iowa, Governor Willson of Kentucky, United States Senator Jones of Washington, Governor Marion E. Hay of Washington, James J. Hill, chairman of the board of directors of the Great Northern Railway Company; Howard Elliott, president of the Northern Pacific Railway Company; F. H. Newell, director of the reclamation service; John Barrett, director of the International Bureau of the South American Republics; N. W. Harris of Chicago and Dr. George B. Angell of Michigan.

The outdoor features, which will give the various communities in the Northwest opportunity to bring their resources prominently before the visitors, include these demonstrations:

August 10, afternoon—Parade of progress, showing the transformation of the Northwest from semi-savagery to civilization, by a series of district floats and mounted men and marchers.

August 11, evening—Illuminated parade of progress, representing various periods

in the Northwest from 1805 to 1909. Indians from four reservations and districts in the Pacific and Western states will join in this demonstration.

August 12, afternoon—Parade and countermarch of the industrial and irrigation army, with 10,000 uniformed men

unfurling of the flags of the nations and banners in the business sections the morning of August 9, when massed musicians, headed by the Third Regiment United States Infantry Band, will play patriotic airs. This will be followed with the rendition of the irrigation ode



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SCENE ALONG THE COURT OF HONOR, ALASKA-YUKON-PACIFIC EXPOSITION

in line. The official emblem of the congress, showing science bidding the desert drink, will be featured on an elaborate float.

The board of control has also set aside August 13 as Governors' day, when it is expected the chief executives of twenty-five states in the Northwest and other parts of the country will be present. It is also hoped to have the attendance of most of the Northwestern senators and congressmen during the week.

The feature of the opening of the congress will be the raising of hundreds of flags to the tops of as many forty-foot poles in the residential districts and the

by a large chorus of trained singers and the singing of state hymns by school children. There will also be receptions, banquets, theater parties and several excursions.

R. Insinger, chairman of the board of control, has received advices from practically every state, territory and province on the continent, also from Europe, the South American republics and the Orient, saying there will be representatives present, and he has been assured of large delegations from Kansas, New Mexico, Texas, Utah, Colorado, the Dakotas, Wyoming, Montana, Nevada, Nebraska, Arizona, California, Oregon, Idaho and Washington. Canada, where in the western provinces irrigation promises to become a factor, will send a large delegation, and he also looks for representatives from Southern, Eastern and Middle Western states, where they are interested in forestry, deep waterways, good roads, reclamation of swamp lands and home building.

"We have been assured the hearty co-operation and assistance of the forestry and reclamation services, as well as the Department of Agriculture itself," Mr. Insinger said, "and with the natural activity of the people in the Northwest and in other parts of the country where irrigation is profitably and successfully practiced, we expect to make a congress which shall eclipse anything which has heretofore been attempted."

The national officers of the congress are: President, George E. Barstow, Barstow, Texas; first vice president, H. D. Loveland, San Francisco; second vice president, R. E. Twitchell, Las Vegas, New Mexico; third vice president, I. D. O'Donnell, Billings, Mon-



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VIEW OF MOUNT RAINIER AND LAKE WASHINGTON FROM SEATTLE, WASHINGTON

tana; secretary, B. A. Fowler, Phoenix, Arizona; assistant secretary, F. H. Griswold, Chicago; foreign secretary, Rev. Dr. E. McQueen Gray, Carlsbad, New Mexico. Every state and territory in the Union has a vice president.

The board of control is headed by R. Insinger, manager of the Northwestern and Pacific Hypothek Bank, with Arthur Hooker as secretary, the other members being: Edwin T. Coman, president Exchange National Bank; George S. Brooke, president Fidelity National Bank; R. Lewis Rutter, secretary and manager Spokane and Eastern Trust Company; W. D. Vincent, cashier Old National Bank; J. J. Browne, president of the Columbia Investment Company; A. F. McClaine, vice president Traders' National Bank; W. H. Cowles, owner and publisher The Spokesman-Review; F. A. Blackwell, president Idaho and Washington Northern Railway Company; Jay P. Graves, president Spokane and Inland Empire Electric Railway System; D. C. Corbin, president Spokane International Railway Company; D. L. Huntington, first vice president and general manager Washington Water Power Company; M. E. Hay, Governor State of Washington; J. P. McGoldrick, president McGoldrick Lumber Company; T. J. Humbird, general manager Humbird Lumber Company; David Brown, president Hazelwood Company, Limited; C. M. Fassett, metallurgist; John A. Finch, L. W. Hutton, August Paulsen and Patrick Clark, capitalists; H. L. Moody, manager Moody Land Company; Cyrus Happy, chief counsel Spokane Canal Company; Frederick E. Goodall, president Chamber of Commerce; Robert B. Paterson, president Spokane Dry Goods Company, and Fred H. Mason, president the Holley-Mason Hardware Company.

The executive committee is composed of Mr. Insinger, chairman, and Messrs. Coman, Moody, Fassett, Rutter, McGoldrick and Vincent.

The primary objects of the congress are to save the forests, store the floods, reclaim the deserts and make homes on the land, but the reclamation of swamp lands, deep waterways, good roads and the conservation of the resources of the country in general will be thoroughly discussed. It is also purposed to demonstrate to the West the possibilities of this development and to show to the East the importance and value to the entire country of this work.

The economic value of irrigation, whether by national project or private enterprise, cannot be measured in dollars and cents. It is no longer an experiment in the West; it is a confirmed success from commercial and financial viewpoints, and economists declare that the development of the country will provide a safety valve against the impending dangers of congestion in the cities of the East. Five to ten acres of land in the irrigated districts will provide shelter, food and raiment for a family and enable its owner to put aside from \$500 to \$1,000 a year. Scores of hundreds of men and women, many of whom came from the crowded cities in the East and South, are doing that much or better today.

It has been demonstrated that under irrigation Western land will produce paying crops of anything which grows in the temperate zone. The products are noted for their brilliant coloring, unusual size and excellent flavor, and they command the markets of the world. Vegetables in almost endless variety and the choicest vine and tree fruits follow each other in rotation and fill out the season. There is courage born of conviction and fostered by hope in the superabundant life which springs from the broad desert when moisture is applied, and this gives a constant inspiration to industry and stimulus to greater things.

The government of the United States recognized the possibilities of the lands in the Northwest, where its projects cover nearly a million acres. The largest of these in Washington are the Sunnyside project in the Yakima Valley, 90,000 acres, to be completed at an estimated cost of \$1,600,000; the Tieton, also in the Yakima Valley, 30,000 acres, cost \$1,500,-

000; the Wapato, 120,000 acres, cost \$1,500,000, and the Okanogan, 8,000 acres, cost \$500,000.

In addition to these, the United States Reclamation Service has authorized the Kittitas and Benton projects in Central Washington. The Indian and reclamation service estimate that \$25 or less will cover the cost for water right on the reservation. This is about half the cost of watering land under other canals in the Yakima Valley.

It is likely that in time more than \$50,000,000 will be expended by the reclamation service in the State of Washington in reclaiming 1,500,000 acres of land now entirely or partly waste. Of this, 50,000 acres will be in the Ellensburg district, 200,000 acres in the Rattlesnake and Coal Creek districts, and 10,000 acres in the Valley of the Okanogan.

The government's projects in Southern Idaho are the Minedoka, with an area of 160,000 acres, to be completed at an estimated cost of \$4,000,000, and the



Photo by F. H. Nowell. Copyright 1908

Engraved by Hicks-Chatten Co., Portland, Oregon

SECOND AVENUE, SEATTLE

Payette-Boise, 200,000 acres, costing \$3,000,000. The last named is claimed to be the largest irrigated tract in the world. Oregon has the Umatilla project, 18,000 acres, costing \$1,100,000, and the Klamath, part of which extends into California, 120,000 acres, cost \$3,600,000. There are also several important private projects in the Hood River country. The projects in Montana are the Huntley, 30,000 acres, cost \$900,000; the Milk River, including Saint Mary, 30,000 acres, cost \$1,200,000, and the Sun River, 16,000 acres, costing \$500,000. The Lower Yellowstone project in Montana and North Dakota takes in 66,000 acres and will cost \$2,700,000.

Two hundred private projects are in operation in the Inland Empire. The most important of these is at Wenatchee, Chelan County, Washington. Numerous irrigation canals have been constructed in Chelan County, which has the Chelan, Wenatchee and Entiat Valleys. There are also important works in the Lewiston country and in the Spokane Valley, where 100,000 acres of land is adapted to irrigation. The Spokane River, nearby lakes and an underground stream flowing through the valley are used by these plants, one of which raises the water by means of electric pumps from wells ranging from ninety-seven to one hundred and forty feet. The capacity of this apparatus is sufficient to water 3,000 acres of land.

There are scores of gravity, siphon and pumping plants in various parts of the country and all are successful. The extent of operations on irrigated lands in the Northwest will be better understood when it is known that the value of the apple and other fruit crops in the Inland Empire amounted to \$14,000,000 in 1908. It will be \$60,000,000 in 1912, by which time several million trees set out in the last two years will come into

bearing and others planted between 1903 and 1906 will have reached maturity.

This is only the beginning of the fruit industry in this part of the country, where millions of acres of land, now flecked with the dusty green of the sagebrush, is awaiting the refreshing moisture to make it blossom like the

moisture, while the waters diverted from the mountain sides bring new fertility.

Much of this land, now not worth more than a few dollars an acre, will then readily sell at from \$250 to \$500 an acre, according to location and the character of the soil. That is the history of lands in the now famous Hood River,



STRAWBERRY FIELD AT KENNEWICK, WASHINGTON
On the Northern Pacific Railroad and the North Bank. Owned by A. D. Charlton, assistant general passenger agent of the Northern Pacific

proverbial rose. It has been demonstrated that irrigation will do much more for the growing crops than rain, as the natural element gives nothing except

Yakima, Wenatchee, Spokane, Colville, Okanogan, Bitter Root and Snake River Valleys, where the incomes from fruit range from \$450 to \$2,000 an acre.

TO HOLD NATIONAL APPLE SHOW IN SPOKANE

BY AUGUST WOLF

SPOKANE was awarded the National Apple Show for 1909 by the board of trustees, headed by E. F. Cartier Van Dissell of Spokane, at a joint meeting of that organization with Spokane Chamber of Commerce and the local board of control of the Seventeenth

National Irrigation Congress. Preliminary plans were announced for a larger and more complete exhibition of the king of fruits than the one held in that city last December, when cash prizes and premiums aggregating \$35,000 were awarded to growers in the United States and Canada.

Orchardists in all parts of the world will be invited to compete, and it is expected the prize list will represent more than \$50,000, in addition to cups, trophies and special awards. By making it international in scope and character next fall its educational value to fruit growers will be increased. That is the primary idea. It is the opinion of experts that wider knowledge of apple growing, packing and marketing is necessary, especially since American growers are looking to Europe and the Orient for trade.

The exposition last December, when Michael Horan of Wenatchee, Washington, carried off the chief honors with a mixed car of fruit, cost \$85,000. One hundred and ten thousand persons were in attendance. Forty thousand dollars in cash and premiums of five and ten-acre tracts of land was raised among business men in Spokane. There was a deficit of \$3,500, which was promptly met by one hundred men subscribing \$35 each. The show is not run for profit, but for the purpose of popularizing the apple as a national fruit. It is designed to help the growers in New England, Eastern, Middle Western and Southern states where apple growing is an industry as much as the orchardists in the Northwestern and Pacific states.



CHERRY-PICKING TIME, MOSIER, OREGON. A. P. BATEHAM ORCHARD

SHALL WE CONTINUE TO SPRAY FOR THE MOTH?

BY C. P. GILLETTE, COLORADO AGRICULTURAL COLLEGE

DR. W. P. HEADDEN, in Bulletin No. 131 of the Colorado Experiment Station, has given most conclusive evidence that many apple trees that have been heavily sprayed for years with arsenical poisons are in a sick and dying condition, or are already dead.

This malady has been going under the names, "collar rot," "crown rot," and "root rot," without any well founded assignable cause. There have been several theories as to the possible cause, such as seepage, alkali, and disease organisms. The first two of these troubles are probable one and the same, namely, too much water in the soil, and no one has been able to assign the trouble to a definite micro-organism. It should be remembered, also, that Doctor Headden's experiments have nothing to do with trees that died from drowning; and the writer knows, personally, that many, at least, of the samples of trees analyzed were from land where seepage conditions are unknown.

Doctor Headden's discovery of the real cause of this trouble has come, probably, in time to prevent very extensive losses from the death of orchard trees in this manner. It will be folly, however, for any one hereafter to spray his orchard with arsenical preparations more times or in greater strength than is absolutely necessary to get good results.

Personally, I very much regret, as does Doctor Headden, that arsenical spraying is resulting disastrously to any of our orchard trees; but it is worse than

useless to evade facts, and I am thoroughly convinced that Doctor Headden has been very conservative in his conclusions as to the extent of damage that has already been done to apple and pear

Doctor Headden and Mr. Whipple, are about as follows: Trees usually stunted in growth; bark very yellow; bark often dead and black just below the surface of the ground; the main roots in a similar



ORCHARD AT KENNEWICK, WASHINGTON
Property of A. D. Charlton, assistant general passenger agent of the Northern Pacific Railroad
Located near the junction of the Northern Pacific and the North Bank Road

trees where excessive arsenical spraying has been carried on.

Symptoms of Arsenical Poisoning

The symptoms, in a rather advanced stage of this disease, as described by

condition; leaves yellow and maturing early; apples very abundant, but small and highly colored; the bark of the trunk and main limbs often with vertical cracks which may or may not give out an exudation. Trees strongly exhibiting the above condition one year are almost sure to be dead the next year.

This trouble usually appears first upon a few scattered trees, and from year to year seems to spread to others. In any orchard where a few trees are found in the above condition the utmost caution is necessary in spraying with arsenical mixtures for the codling moth or other insect pests.

How to Spray

Since coming to Colorado, more than eighteen years ago, the writer has steadily urged the fruit growers of the State to depend chiefly upon a thorough treatment or two just after the blossoms fall, and has advised not more than one late treatment. While this has now become a very general rule among Colorado apple growers, there are still many who think if two or three sprayings are good, more will be better, and it is in the orchards that have been sprayed four or five times or more each season that most of the mischief has been done.

Now, instead of recommending two or three applications for the codling moth, I am fully persuaded that it is best to recommend one, or at most, two.

If an orchard has a few trees that show the characteristic symptoms of poisoning, as given above, or if the trees have been heavily sprayed for several years, I would recommend one spray only just as the blossoms are about ninety per cent off. If the trees have not been excessively sprayed, and if for any



STRAWBERRY PACKING SCENE AT WILLIAM CRAPPER'S
HOOD RIVER VALLEY, OREGON

reason the first application was not very satisfactory, it might be advisable to make a second application, from four weeks to thirty days later, which will be the time for the eggs of the first brood to begin to hatch well.

Arsenate of lead is by odds the best to use, as it is least soluble in water.



ARTHUR HOOKER
Secretary Board of Control, National Irrigation
Congress.

We have been recommending from three to five pounds of the poison to each one hundred gallons of water; but since Professor Melander has demonstrated that two pounds to one hundred gallons are sufficient for the best results in Washington State, I believe it is advis-

BETTER FRUIT

able to recommend two, or not more than three pounds, to each one hundred gallons of spray, for Colorado. And no lime to the mixture.

Some Precautions

Use a fine spray, with good force (one hundred and fifty to two hundred pounds pressure), as a given quantity of spray material will go further in this way and give better results.

The amount of material used can also be economized by spraying the upper portion of the trees from a tower, so as to direct the spray downwards into the calyx cups.

Avoid spraying the trunks and large limbs, so as to cause the liquid to run down and collect about the crown of the tree.

If much of the spray does collect about the crown of the tree, or if the trees have received repeated heavy sprays in former years, it would be well to follow Doctor Headden's advice to remove the poisoned dirt from about the crowns and replace it with fresh dirt from between the rows.

Avoid using strong alkaline water for the spray tank, as it will dissolve some of the poison and increase the danger of arsenical poisoning.

In orchards already suffering severely from arsenical poisoning, it might be advisable to abandon the spray for a time and depend upon bands and the prompt destruction of all wormy fruit to keep the worms in check.



INTERNATIONAL APPLE SHIPPERS' ASSOCIATION

Office of the President

Chicago, April 24, 1909.

To Apple Operators of the Northwest:

The International Apple Shippers' Association extends to every dealer in apples of the country, and especially to those of the great Northwest, an invitation to attend its annual meeting, to be held the first Wednesday in August, 1909, at the Clifton Hotel, Niagara Falls, Canada.

The International Apple Shippers' Association was organized for the purpose of "promoting the best interests of its members and the apple industry of the United States and the provinces of Canada in general, in obtaining and disseminating such information among the growers of apples as will encourage the production of the best quality of this variety of fruit; to establish uniform grades and encourage honest packing in uniform sized packages; to obtain for the use of its members from time to time such information regarding apple conditions as will be of interest to them, and by concert of action endeavor to correct any abuses in discrimination of freight rates and dishonest practices." Along these lines has it met with success in much larger measure than is usually met with by such organizations. It has been demonstrated that co-operation along the lines indicated does pay, and that the benefit reaped from its efforts are enjoyed

by not only the membership, but the producer and consumer in equal measure.

The association not only invites your attendance at its annual meeting, but invites your membership, and applications for such membership can be had by addressing the editor of "Better Fruit" or the officers of the association.



JUST A FRUIT GROWER
The editor and publisher of "Better Fruit," Hood River. That's all.

In the full belief that good will come to the operator as an individual and to the Northwest as an apple-producing section by closer getting together, the association through its officers presses upon you its invitation.

William L. Wagner, President.
C. P. Rothwell, Secretary.



WILLIAM MCMURRAY
The popular general passenger agent of the O. R. & N. and Southern Pacific Railroads, whose publicity work in upbuilding the State of Oregon is attracting universal public appreciation.



GEORGE E. BARSTOW, TEXAS
President National Irrigation Congress

APPLE GROWING IN THE PACIFIC NORTHWEST

BY AUGUST WOLF, SPOKANE, WASHINGTON

TO GROW apples successfully without irrigation it is necessary to exercise judgment in the selection of the soil, location, varieties, qual-

first half is well done it makes the second half much easier. Neglect of any one of the factors will modify or entirely wipe out any possible profit.

Professor Cyrus L. Smith, a veteran institute lecturer, and now agricultural expert for the Spokane & Inland Empire Electric Railway System, emphasized this in the course of an address on "Apple Growing without Irrigating," to the students at the Spokane Young Men's Christian Association. He said among other things:

"Apple production in the Northwest has for a number of reasons, been greatest and most remarkable in the irrigated valleys. The marvelous results that have been achieved by individuals and associations, have attracted world-wide attention, and because of this many people believe that profitable apple production is limited to irrigated districts.

"Apple growers in irrigated districts are, as a rule, engaged in no other line of farming. They are generally organized into associations, and do their gathering, picking, packing and marketing more intelligently than scattered, unorganized growers in the unirrigated districts, who are carrying on a diversified system of farming, in which orcharding is a minor factor, and far too often a neglected one.

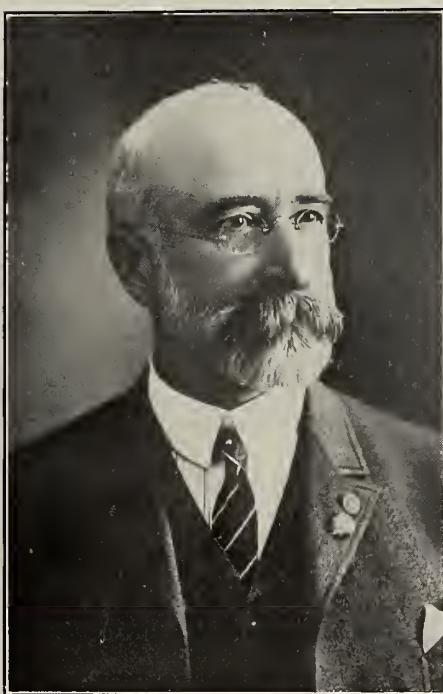
"Yet with these handicaps the production of apples along the foothills in Washington is an important and profitable industry. It is so profitable that no other line of productive industry can show such a high percentage of profit as a well-planted, well-cared-for orchard will pay on the amount of labor and capital invested.

"Another fact that has been learned by experience is that some varieties that are profitable and satisfactory in the lower valleys are not adapted to the higher altitudes, while other varieties that produce indifferent results in the lower valleys grow to perfection on the higher lands two thousand to twenty-five hundred feet above sea level.

"This is true of the Wagener, a variety that is of doubtful value for planting in the valleys, but seems specially adapted to the hill lands. The tree is a hardy, thrifty, upright grower, bears young and yields enormously. The fruit is fine flavored, crisp and juicy, medium size, bright red or red and yellow, a good keeper and a good seller.

"Another variety that has demonstrated its adaption to these hill lands is the Rome Beauty, a fine flavored, long keeping, red striped apple of well recognized commercial value. The tree is an upright grower, so thrifty, in fact, that it is sometimes difficult to keep in shape and train until it comes into bearing. It bears young, and with proper care it will produce annual crops uniform in size and color. Its shape, size and color are all attractive, and make it a good market variety, especially for late winter.

"The Jonathan is another variety that has shown wonderful adaptation to the soil and climate of the hill lands. Good Jonathans are grown in other places, but



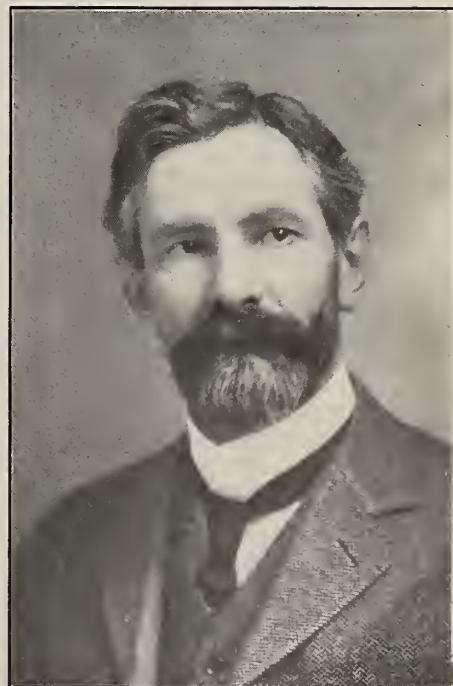
B. A. FOWLER, ARIZONA
Secretary Seventeenth National Irrigation
Congress.



M. O. LOUNSDALE, ONE OF THE OLDEST
HORTICULTURISTS IN OREGON
He set and planted El Ranchito orchard, consisting of over 300 acres, which he planted eighteen years ago, being the largest orchard in the State of Oregon. Recently Mr. Lownsdale sold El Ranchito orchard for \$275,000 to capitalists, who have incorporated under the name of the "Lownsdale Orchard Company." This orchard is situated at Lafayette, Oregon.



TOM RICHARDSON, PORTLAND, OREGON
To whom community organization is a religion



R. INSINGER
Chairman Board of Control, National Irrigation
Congress.

but not so strong a grower as Wagener or Rome Beauty. The branches are slender and inclined to droop. It bears young, a six-year-old tree producing six to eight boxes (bushels) of apples.

"These trees are the commercial sorts for hill lands, although nearly all the leading sorts of the country, such as the Pippins, Greenings, Spitzemberg, Baldwin, Bellflower, Spy, Pearmain, etc., are to be found in the older orchards. None of these other varieties has demonstrated its special adaptation to the soil and climatic conditions as the three mentioned.

"These statements are not based on any theory or guesswork; but on actual experience and observation in the orchard, and a careful study of the methods and practices of others; successful and unsuccessful. The best orchard site is a moderately sloping hillside, a northern slope having some slight advantage, with higher ground nearby on one side and lower ground on the other. A basin or flat should be avoided. The soil should be deep; the deeper the better. It is seldom profitable to plant an apple orchard where there is less than three feet of good soil over the rock or where there is hardpan within three feet of the surface. A clay loam is preferable.

"As a rule it would be found unprofitable to try to grow apples on sandy or gravelly soil without irrigation. The ground should be worked deep and fine before planting. If trees can be secured that have ripened their wood early, then late fall planting is better than spring. Spring planting is all right; but the earl-

BETTER FRUIT



PRIZE-WINNING CAR FROM THE GREAT YAKIMA VALLEY
On sale at Covent Garden, London, England. A typical fruit auction scene

ier it is done the better. Get clean, thrifty, but not overgrown one-year-old trees; three to four feet in size is better than the larger sizes. Procure them from the nearest reliable grower; or what is better, procure scions from trees that you know have borne the kind of apple you want, and grow your own trees.

"If trees are ordered from a nursery insist on careful handling and packing,

and when the trees are received immediately heel them in, being careful to work fine soil close to and around the roots. Do this even if you expect to plant the next day. Never expose the roots to the sun or wind, nor allow them to get dry. Trim off all bruised or broken roots. Make the holes large enough to spread the roots naturally, and set them one or two inches deeper than they grew in the nursery; work the fine soil firmly around the roots, not against them. When the roots are well covered, firm down with the foot, pressing the earth down and toward the tree. Cut back to eighteen inches."



ANNUAL MEETING COAST NURSERYMEN ASSOCIATION

THE seventh annual meeting of the Pacific Coast Association of Nurserymen will convene at Seattle, Washington, July 14, that date having been designated as Nurserymen's Day by the Alaska-Yukon-Pacific Exposition, special attention being given to our Association. An admission ticket has been granted for each member whose membership fee of two dollars has been sent to the Secretary-Treasurer before the meeting, indicating good standing in the Badge Book. A popular program for the day is under preparation, meeting hall and music to be provided by the Exposition. Business sessions following to be announced. The Executive Committee invites suggestions for the popular and the business part of the program. Will you kindly send such copy at once as you wish to have appear in the Badge Book. The price per page is five dollars; half page, two dollars and seventy-five cents, and quarter page a dollar and a half. Last year's Badge Book was well received and several new members have been added. Please include membership fee in reply.

C. A. Tonnison, Secretary-Treasurer.
Box 104, Tacoma, Washington.



CARLOAD OF APPLES FROM WENATCHEE VALLEY—A GREAT PRIZE-WINNER SECTION
This fruit was taken to England by William Edmonds, one of the directors of the Wenatchee Valley Association.

NEW ADMINISTRATION OF AGRICULTURAL COLLEGE

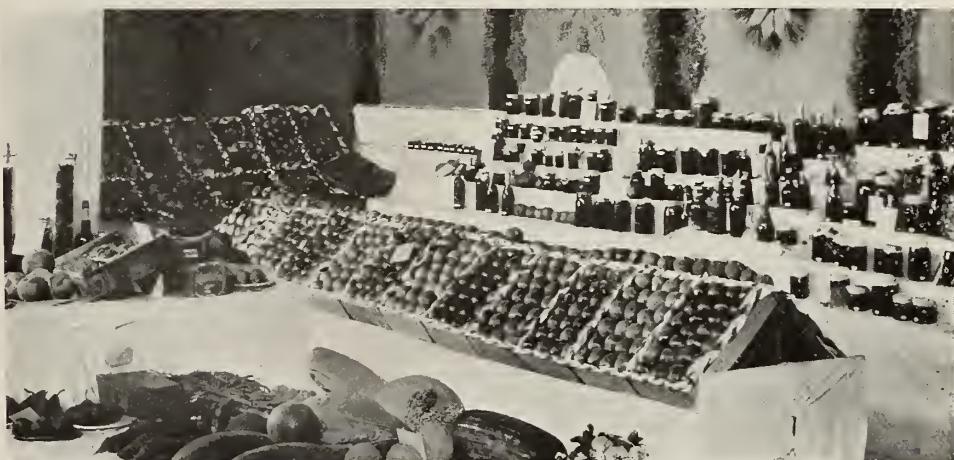
BY E. C. GALLOWAY

ON THE resignation of the venerable President Gatch, the Oregon Agricultural College was indeed fortunate in securing so able a man as President W. J. Kerr, of the Utah Agricultural College to fill the executive chair. President Kerr is an experienced educator, and has made land grant colleges and their work a life study. Having visited the large agricultural colleges and industrial schools of the East, and made a careful study of the different systems and policies in vogue in these institutions, he possesses a thorough knowledge of modern educational methods. President Kerr is decidedly a man of action; a man who deliberates cautiously and progresses with confidence; a man who is a sincere friend and helpmate of every student in the institution, but who meets questions of discipline with a firmness that leaves no room for doubt. Under his regime the college is undergoing a process of evolution and reconstruction that bids fair to place it on an equal basis with any institution of its kind in the United States.

The policy of the new administration is pre-eminently progressive. The purpose is to make the work of the Oregon Agricultural College throughout all its departments strictly up-to-date and in every way adapted to the needs of the state. That the best results may be realized with the available resources, special emphasis is placed upon the

necessity of close specialization and complete organization. The work of more completely organizing the college, and of securing greater concentration on the part of specialists in the different depart-

gated and additional professorships were established. Additional professors and instructors were employed, and the work generally was strengthened. But an ideal college is the product of growth,



APPLE AND CANNED FRUIT EXHIBIT AT LEWISTON, IDAHO, AND CLARKSTON, WASHINGTON, INTERSTATE FAIR

ments, was begun by the new president immediately upon assuming the duties of his office. Many important changes have already been made this year, and others are in contemplation for the immediate future.

At the meeting of the Board of Regents in July last, the work of a number of the departments was segre-

and it is quite impossible, with limited resources, to effect a perfect organization in one year. Changes to go into effect next year have already been authorized by the Board of Regents, which means much in the future development of the college. The standard has been advanced one year, increasing the requirements for admission to the Freshman class to two years of high school work. This will strengthen the degree courses in many ways, and enable students to carry the work in which they are specializing much farther than has heretofore been possible. At the same time the advantages of the institution will not thereby be removed farther from the people in need of the training it affords. For persons who desire work relating directly to their vocations, but who are not able to pursue an advanced college course, elementary industrial courses have been established in Agriculture, Mechanical Arts, Commerce, and Domestic Science and Arts. Students may be admitted to these courses from the eighth grade, and will be allowed to pursue the special work in which they are interested, whether in the handicrafts, or in agriculture, business, or household technology.

For administrative purposes, schools have been established in Agriculture, Engineering, Domestic Science and Arts, and Commerce, each school comprising the different departments indicated by the name of the school. During the year each school will be organized and a plan perfected by which to insure the most efficient administration of college affairs. The president of the college, the director of the experiment station, and the deans of the different schools, will constitute the Administrative Council, the functions of which will be to deal with the larger questions of college policy and administration; while the strictly legislative matters relating to instructional work will



DR. W. J. KERR

The new president of the Oregon Agricultural College, Corvallis, Oregon, whose wonderful executive ability and energy have already done wonders for this college in the last year, having secured from the State Legislature a splendid appropriation, which we have not had for many years past. Dr. Kerr is devoting his whole soul to the upbuilding of this institution, which has about thirteen hundred students enrolled at the present time. In horticulture, agriculture and dairying the college experiment station is already recognized as being one of the leading experiment stations in this line of work in the United States, and at the present rate of progress under the administration of Dr. Kerr the time is not very far distant when this institution will have no superior in any of the states of the Union.

BETTER FRUIT

July

be in the hands of what is known as the College Council, consisting of the president and the heads of departments.

Professorships have also been established in Veterinary Science and Industrial Pedagogy. The latter was established in pursuance of the demands of the people for the introduction of indus-

will be very much strengthened, as there is a great need of specialists in veterinary medicine in the development of the live stock interests of the state.

These are a few only of the most important features of the new plan being worked out for the development and strengthening of the institution. The new policy, when fully developed, will open up a broad field for specialization. The professor of each department will be a specialist in his line, and will be held directly responsible for results obtained in his department. The School of Domestic Science and Art will have four of the most efficient instructors that can be secured. The work in this school will cover a broad and varied field, yet giving special training in all those branches distinctive of the course. The work in the other schools will be expanded and specialized in much the same manner. The business office of the college will be so conducted as to be a model for the commercial students. The School of Commerce will be enlarged so as to afford students an opportunity to specialize in expert accounting, trade and transportation, banking and finance, business administration, etc. It is expected that a large number of additional professors and instructors will be employed—the very best that can be secured in the large colleges of the country.

In this work of reconstruction, the underlying questions of policy are: First, complete organization; second, close specialization; third, thoroughness and efficiency in all the work of the institution; and fourth, to bring the college nearer to the people of Oregon and to make it render to them the greatest possible service.

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WAshington, Oregon, Idaho, Montana, Colorado and Utah and British Columbia are certainly destined to be great fruit producing states. We are in our infancy. The combined output of wheat and gold in the State of California in 1907 was less than the output of fruit, which amounted to \$75,000,000. The State of Oregon produced in 1908 about \$5,000,000. The State of Washington a little more. Colorado probably about the same. Utah, Idaho and Montana probably somewhat less.

Each and every one of these states in the near future will soon be able to produce, if not as much, almost as much as California. The opportunity is before us. We wideawake people certainly should grasp this opportunity and benefit by it. Fruit growing in these states is a paying business. It is a paying business because the Northwest grows the



WILLIAM MEISTER

Proprietor of the California Commission Company, 923 Western Avenue, Seattle. Mr. Meister is a man of twenty years' experience in the commission business. This firm is one of the oldest and largest firms in Seattle, the biggest city of the progressive State of Washington, where the Alaska-Yukon-Pacific Exposition is now being held. This firm claims over 1,800 shippers. This statement in itself is evidence of a big business. Their policy of reporting sales prices weekly, and daily or oftener if necessary, is one of the policies that the fruit grower appreciates in connection with shipping his fruit on consignment. While this firm handles fruit from all over the State of Washington, they make a specialty of handling fruit from the celebrated Cashmere Valley and the famous Wenatchee district. They refer to their financial standing to R. G. Dun & Company and the National Bank of Seattle. They offer to cheerfully furnish endorsements from actual growers, so that the fruit shipper can thoroughly satisfy himself about their methods of business.

fanciest fruit in the world, the best shipping fruit and the longest keeping fruit. There is no other district that competes with us. Not only that, but we have an ideal soil and an ideal climate, troubled with very few diseases, and if any exist they are under proper control. We are seldom troubled with frost except in restricted localities or unusually low spots. The East has not got the soil or the climate that we possess in the Northwest, and they do not grow fruit that will compete with the fruit grown on the Pacific Coast. We are advised by many growers that, as a rule, particularly in the Middle West states, fruit growing is not a profitable business, therefore there is a splendid opportunity for the Pacific Coast and the Northwest in particular.

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THE Oregon State Horticultural Society, through its president, H. C. Atwell, announces the following committees:

Standing committee on legislation—W. K. Newell, E. C. Armstrong, A. C. Goodrich, J. L. Carter and J. B. Nunn.

Committee on Reorganization to meet requirements of Hoskins bequest—E. R. Lake, H. M. Williamson and A. I. Mason.



GEORGE E. BRYANT

The Seattle Fruit and Produce Auction Company is located at 316 Railroad Avenue South, Seattle, with ample trackage facilities for conducting a car-lot and jobbing business. George E. Bryant, manager of the concern, has been engaged for more than twenty years in the general fruit and produce business and has a wide acquaintance from coast to coast. Selling fruits, vegetables and produce at auction is an established business in the principal Eastern jobbing centers, and since this firm began business about nine months ago it has been demonstrated to the satisfaction of many shippers within that state, Oregon and California, that the auction system may be worked out as successfully here as elsewhere. Correspondence with associations and car-lot shippers is especially solicited.

trial work into the common and high schools of the state. The purpose is to take students who have received their technical training in the different departments of the college and give them the special pedagogical work required in order that they may be prepared to teach industrial subjects in the public schools. By the establishment of a chair in Veterinary Science, the work in agriculture



PRODUCE BUILDING, WESTERN AVENUE, SEATTLE, WASHINGTON
This picture shows one of the splendid brick blocks occupied by the commission men of Western Avenue, generally known among fruit growers as "the Street."

PRUNING DIFFERENT VARIETIES OF GRAPE VINES

BY E. H. TWIGHT, LEWISTON, IDAHO

Possibly no tree or shrub can stand more ill treatment than the grape vine and yet give some return. This fact may be the reason why so little study seems to be given to the



J. B. POWLES

Of the J. B. Powles Commission Company, commission men and fruit dealers, Western Avenue, Seattle, Washington. This firm is one of the oldest and largest firms on the "street," doing an immense business, which is evidence of its popularity and fair dealing. Mr. Powles, in addition to being prominent in the fruit business, is one of the prominent and leading citizens of the wonderful city of Seattle.

pruning of the grape. The vineyardist being satisfied with the crop he is getting, grows into the idea that he understands thoroughly the care of his vines and does not try to improve his method—if method there is.

A visit to the average vine patch in our neighborhood will bring out several points. No two vines look alike; they have all kinds of sizes and shapes. In other words, there is no system of training. The usual vine has a large flat stump close to the ground with several long arms growing out from it in no special direction and on these arms spurs of different lengths are left. The flat stump near the ground is a constant danger to the vine as it is very apt to start decaying in the center and this eventually will kill the vine. The several arms generally make an unbalanced vine that will not bear evenly; one arm will bear grapes and the others go to wood.

It must be remembered that in the vine the fruit is borne on the growing shoots of the season, which spring from wood of the previous season's growth, so that in the fall there are no distinct fruit buds as on most fruit trees. The fruit clusters on American varieties are generally near the base of the growing shoot. In European vines, however, they may be on different parts of the growing shoot, according to the variety.

In order to follow this discussion more comprehensively, let us say that a growing green branch of the vine is called a shoot; one year old ripened branch is called a cane; branches two years old, or older, are called arms.

If left unpruned every bud on an old cane will produce a shoot which may bear fruit; if this were allowed the vine would give an enormous lot of small bunches, would overbear and probably have no crop the next season. If this were kept up the vine would wear itself out in a few years. The pruning of the vine has for its object the keeping of the production within reasonable bounds, so as to have regular crops of good quality, and lengthening of the life of the vine. This thinning process is done in a way that will train the vine according to a system best adapted to the local conditions.

In our locality, and in similar situations in Eastern Oregon and Washington, we will have to discriminate somewhat between the training of American and European varieties; the former not needing any protection in winter can be trained higher than the latter which need covering up through the cold season. It must be also borne in mind that where ever the European varieties can be grown, they will displace the American varieties as the competition in marketing will not be as keen. The European varieties can all be turned into wine that can find a market at any time, while the American varieties cannot compete in that line.

Pruning of American Varieties

Two systems are mostly used today, the "High Renewal System" and the "Kniffin System."

High Renewal System—In this system three wires are used; the first one two feet from the ground, the others eighteen inches apart. A single trunk is trained to about one foot and two canes are



H. S. EMERSON

Of H. S. Emerson & Co., one of the oldest reliable fruit firms in Seattle, Washington

allowed to grow in opposite directions so as to be trained along the first wire. Shoots growing from these horizontal canes will be trained in an upright direction and tied to the upper two wires.



ONE OF THE BRICK BUILDINGS ERECTED FOR THE COMMISSION HOUSES OF SEATTLE In which is located Elmerath & Radford, wholesale fruit and produce, a popular new Western Avenue firm that is very enterprising. The California Commission Company, one of the old firms which does an extensive business in fruits and produce, is also located in this building, although their sign does not appear. Ryan Bros. Company have their office in the second story. Mr. Thomas Ryan is a brother of the Mr. Ryan of Ryan & Newton, the well-known firm doing business in Spokane and Butte.



KENNEWICK, WASHINGTON

Wonderfully located for transportation at junction of the Northern Pacific Railroad and North Bank Road, and at the junction of the Columbia and Yakima Rivers. The bridge shown is 2,000 feet long. The mouth of the Yakima River at Kennewick is the Golden Gate to the great Yakima Valley.

Two shoots must be provided on the horizontal canes, close to the trunk, for the renewal of these horizontal canes at the next pruning. Thus the two horizontal canes are always one year old wood, and are renewed each year. The length of these canes after pruning will depend on the vigor of the vine.

Kniffin System—This is a drooping system of training. Two wires are used; the trunk is carried up to the second wire and two opposite canes are left at each wire and are trained horizontally. The shoots growing from these are allowed to hang down so that no summer tying is done; only the trunk and

the four horizontal canes are tied. When pruning all the wood is cut off with the exception of four spurs to renew the horizontal canes. A system of renewal of these canes similar to that provided in the "High Renewal System" can be applied.

Pruning of European Varieties

Two main systems can be applied without trellis and with trellis. Most wine grape varieties and many table grapes can be trained without trellis. A low trunk is built and three or four spurs are left with two eyes. These spurs must be well selected so as to give

a cup shape to the vine. A stake is planted along each vine and the canes growing from these spurs are tied up together to the stakes. This system can be applied to all varieties bearing their clusters on the lower part of the canes. Varieties bearing their clusters higher up on the cane can be trained in a similar way by having the spurs with six to eight buds and keeping also renewal spurs with two eyes for the following year's pruning. If the trunk is kept low such vines can be covered over by plowing towards the vine on all four sides.

When trellising European vines the most promising methods are the Caze-neuve system and the Guyot system.

Caze-neuve System—Three wires are used. The first wire is a foot from the ground, the two others eighteen inches apart. When the young vines are strong enough to give canes ten to twelve feet long, that is the second year from planting, all the canes are suppressed except one that is bent and trained along the lower wire, then buds are left on this cane about one foot apart and all others rubbed off. The shoots growing from these buds the following season are cut back to six or eight buds at the next pruning. From then on, when pruning, for each long spur with six to eight buds, that is kept, a short renewal spur with two buds is also left. Each winter the arm can be untied and bent down so that it can be buried.

Modified Guyot System—In this system the horizontal arm is renewed each year. This is very satisfactory when properly done but it needs more care to



HOME OF JIM GALLOWAY, FRUIT GROWER, SPOKANE VALLEY

handle. A stake is planted at each vine and two wires are stretched between them, one a foot from the ground, the other eighteen inches or two feet above. As soon as the vine is vigorous enough a long cane is bent and trained along the lower wire, and a short spur with two eyes is kept near the stake; all other wood is cut off. The shoot growing from the short spur is tied to the stake upright. The shoots growing from the horizontal cane are trained in a slanting position to the upper wire. Next pruning, the horizontal cane is suppressed, leaving only a short two-eye spur close to the stake, and the long cane that was tied to the stake is bent so as to furnish the horizontal cane for the next season. It may be easier to change the direction of the horizontal cane; that is, if one year they are running from north to south, the following year they may be run from south to north.

It will be seen that the American high renewal system is really the double

HUNTLEY IRRIGATION

THE Northern Pacific Railway Company has just issued a tasteful and effective pamphlet advertising the land watered by the Huntley irrigation project of the government, fourteen miles east of Billings, Montana, and directly on the lines of both the Northern Pacific and Burlington. A striking cover, carrying the ingenious design of "Uncle Sam" watering a farm with a sprinkling can,



PART OF THE CITY OF WHITE SALMON
The rapidly developing White Salmon Valley is just opposite Hood River, on the North Bank Railroad, and is one of the best fruit sections in the state

Guyot system, two horizontal arms being kept instead of one. It is much more difficult to keep two arms balanced than one.

In all of these systems of pruning care must always be taken to keep the vine down by proper renewal of the arms.

PROJECT AT BILLINGS

embodies the theme of the pamphlet in an attractive and forceful manner. The passenger department of the Northern Pacific has issued an unusually large number of advertising publications this year, many of which have been mentioned in these columns, and this Huntley project pamphlet is of the same high standard, in point of artistic style and efficient character, as the others. Copies

of the Huntley pamphlet may be obtained by addressing either the General Passenger Agent or the General Emigration Agent of the Northern Pacific Railway, St. Paul.

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WILLIAM EDMUND, director of the Wenatchee Valley Fruit Growers' Union, was sent to Europe by his association, spending six months in England and Scotland investigating the fruit markets and conditions. In an address before a meeting of his own people at Wenatchee he made the statement that Hood River Apple Growers' Union brand was the only pack of apples that sold on the English market where the bidder and buyer did not open the box. Moral: Put up an honest pack and do it all the time.



Engraved by Hicks-Chatten Co., Portland, Oregon

STEAMER LEAVING SEATTLE, WASHINGTON, FOR ALASKA WITH A.Y.P. VISITORS. FINEST INLAND OCEAN TRIP ON THE PACIFIC

THE ARSENICAL POISONING OF FRUIT TREES

BY W. PADDOCK, FORT COLLINS, COLORADO

I HAVE noticed with interest the criticisms of Dr. Headden's work on the arsenical poisoning of fruit trees which have appeared in "Better Fruit." Since I have had charge of the horticultural and pathological work of the Colorado Experiment Station for the past nine years, it will be seen that I am directly interested in this controversy.

Professor Whipple and I have given this subject a great deal of attention for the past five years, but our studies brought us to no definite conclusions. In the meantime a number of the growers at Grand Junction had insisted that arsenic was causing the death of some of their trees. Finally the question was urged upon Dr. Headden and the results of his experiments were published in the bulletin with which your readers are familiar.

We, the workers at the Colorado Agricultural College, regard the work of Dr. Headden as conclusive and it is also accepted by the great majority of our growers. In the meantime spraying for codling moth will be done just as vigorously as before, but more intelligently.

Now in regard to Dr. Ball's paper. I do not find that he makes a single point. Ridicule and reflections upon a man's ability as a chemist will scarcely serve as proof. It is certainly "going some" to intimate that the people of Colorado do not know when a tree is dying of seepage when we see it. True, we lose a great many trees by seepage, also from

neglect, winter injury, sun scald, blight, root rots and various causes other than arsenic. But, contrary to Dr. Ball's supposition, trees suffering from arsenical poisoning are found quite as plentifully upon well drained mesa land and where there is no possibility of water contamination as in the localities mentioned in

It is true that Dr. Headden is neither a plant pathologist nor horticulturist as Dr. Ball asserts; however some of the rest of us have aspirations, at least, in these directions. In the meantime these studies with arsenical poisoning are being continued and many new facts have been learned. Another bulletin on



PEAR ORCHARD OF HORACE MYERS, BOISE, IDAHO

the bulletin. And moreover, Dr. Headden has been familiar with the composition of Grand River water for many years.

Many of the Western fruit growers have had experience in the Northeastern states, consequently they are familiar with the conditions described by Mr. Hall, of New Hampshire. His broad assertion, however, that "there can be no question about the trouble there being identical with ours here," need not be commented upon.

this most important subject by Dr. Headden will probably be published some time during the year.

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Almost the whole world knows of Hood River as a place that produces the best fruits, and all of Hood River Valley should know, and could know, that there is one place in Hood River, under the firm name of R. B. Bragg & Co., that the people can depend on getting the most reliable dry goods, clothing, shoes and groceries at the most reasonable prices that are possible; try it.



SPRAYING IN THE LOWNSDALE ORCHARD, LAFAYETTE, OREGON

NO PROFIT IN GROWING APPLES IN NEW YORK

NEW YORK TIMES

IN reference to the editorial query in the New York Times recently as to why the 12,000 abandoned farms in New York state could not be made to grow apples as abundantly as those of

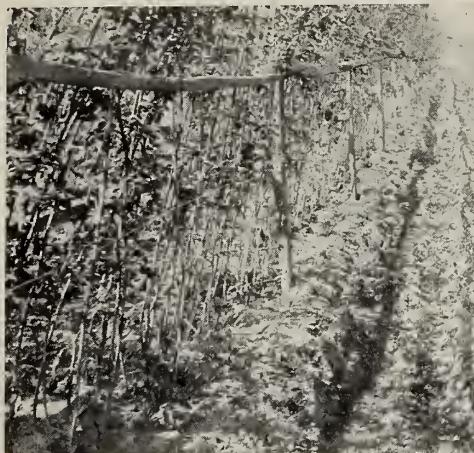
Island wants to go West, and will not go up state or to New England, the chief reason being that there is not so much chance for him here in the immediate future in the East as there is out West.

"The up-state railroads prefer to handle through freight and do not seek local business. Unless a farmer can grow enough apples to get his own cars he encounters the way freight system, which means high rates and poor facilities. If he sends his fruit by water in the summer, the railroads cut him off in the winter when the river is frozen up.

"When the farmer does get his apples to this city he is at once in the hands of the commission ring, who are under an agreement with the jobbers not to sell direct to the retailers. The biggest hotel in the city cannot buy a barrel of apples direct from the farmer.

"The only thing for the up-state farmer to do is to convert his farm into grazing land and either breed cattle or grow hay. There is no reason why cattle could not be bred here in the East as well as in the West, and there is always a market for beef in New York or any other big city. Pigs would pay, and they can be bred anywhere, and chickens can be raised no matter how poor the land is.

"The city might do something to help the farmer by selling him the refuse from the ash carts daily instead of dumping it into scows and taking the garbage to sea. It is all put into barrels, and could easily be taken away and empty barrels put in the place, which would bring a revenue of thousands of dollars to the city and keep the streets clear of the tons of dust that rises in the air through the ash barrels being dumped into the carts. But that would go against the politicians who have the graft of the scow and towing contracts, so I don't think there is any hope for such a beneficial system.



FAMOUS RASPBERRY FIELD OF SENATOR W. H. PAULHAMUS, SUMNER, WASHINGTON
President of the Northwest Fruit Growers' Association

Oregon, Frederick Gore King of 72 Rector street, who has cultivated apples at Garrisons, New York, for more than twenty years, says that the plan is impracticable for many reasons.

The chief obstacles are, according to Mr. King, the scarcity of labor, expense of cultivation, lack of shipping facilities, and the commission ring in this city, which prevents the retailers from buying their apples direct from the farmer.

After twenty years of expense and labor Mr. King has decided that his apple orchard is a losing venture, and intends to clear the trees out and devote the ground to growing hay.

"To cultivate an apple orchard successfully," said Mr. King yesterday, "you must keep the ground well plowed and sacrifice it entirely to the fruit. There is no chance of a second crop, as apple trees absorb all the nourishment there is in the ground.

"The soil becomes exhausted rapidly and needs frequent fertilizing. The trees must be carefully sprayed, pruned, and renewed from time to time.

"One of the greatest difficulties the farmer up state has to contend with is the labor question. It is not the price he has to pay, but the difficulty in getting it. When I was a lad we had plenty of Irish labor, good, honest workmen, who gave a day's work in return for their wage. Now there is no more Irish labor, the supply has become exhausted.

"The Italians the farmer can sometimes get are, as a rule, not worth their salt on the land. They are imitators and will learn no more than they want to learn. The Italian mind is peculiar, as it seems able to limit its capacity for understanding. To make an Italian work hard you must show him clearly that there is some great advantage in store for him before he will do a day's work or take any interest in things.

"As a rule, the German or Scandinavian immigrant who lands from Ellis

"In California the man going there with his wife and family can get a small piece of land around his cottage and improve it. By thrift he can in time become a farmer himself, and that is the magnet which draws immigrants to the West.

"There are no facilities for shipments from up state to New York as there are in the West. In California and Oregon there are cold storage houses, where the apples are placed directly after they are picked until the train of special fruit cars comes along and brings them to Eastern markets.



PACKING SCENE AT ORCHARD NOW OWNED BY FRED HOPKINS
Central Point, near Medford, Rogue River Valley, Oregon. This valley holds the carload records for prices on pears and is celebrated for its fine apples, peaches and grapes.

THE SPOKANE, PORTLAND & SEATTLE RAILWAY

THE construction of the Spokane, Portland & Seattle Railway, familiarly known as the "North Bank" road, between Spokane and Portland, is an event in the development of the Columbia River basin, the Inland Empire and the city of Portland of very great importance. Announcement is made that May 3, 1909, the Spokane, Portland & Seattle Railway placed in operation through trains between Spokane and Portland. By the construction of this road, Portland and the Columbia River basin, in connection with the Northern Pacific Railway, are placed in much closer touch with Spokane, the center of the Inland Empire; with the Palouse and Walla Walla regions, and with Lewiston and the country tributary to the Snake and Clearwater Rivers. This part of the United States lies between the Cascade Mountains on the west, and the Bitter Root Mountains on the east, and is a great area where fifty million bushels of wheat are produced annually, and where there are many active business enterprises now, and opportunity for more.

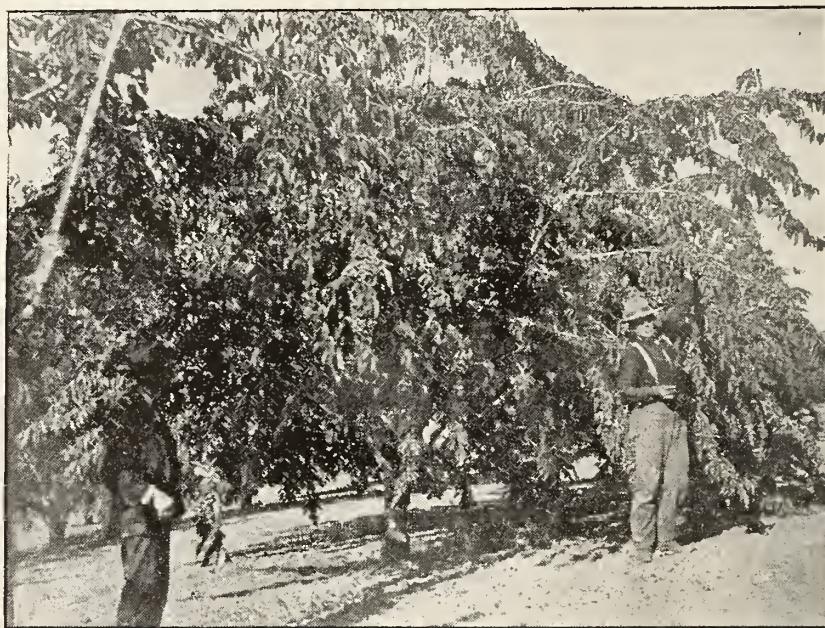
When Lewis and Clark made their trip from the Mississippi Valley to the Pacific Coast, they tried to follow the lines of the least resistance by way of the Missouri River to its headwaters, thence over the Rocky Mountains by the last trails known to the native Indians; to the headwaters of streams that are tributaries of the Columbia River; thence down the Clearwater and Snake Rivers to the mouth of the mighty Columbia.

The Northern Pacific Railway, in its original plans, contemplated a line to Puget Sound over the Cascade range, which was built, and also a line down the Columbia River about where the new Spokane, Portland & Seattle road now goes. In the year 1905, the construction

of that part of the new road from near Pasco to Vancouver was begun, and this road has been constructed with a maximum grade of only two-tenths of one per cent between Pasco and Portland. The same grade is used eastwardly from Pasco 26.09 miles, from which point the

pound steel rails, heavy ballast and adequate facilities of all kinds, so that as the country grows, the road will be in position to transport a very large volume of business.

The great bridges over the Willamette and Columbia Rivers which furnish an



THE DALLES, OREGON, IS FAMOUS FOR CHERRIES, PEACHES AND GRAPES
The Dalles will exhibit six hundred boxes of cherries at the Alaska-Yukon-Pacific Exposition
The above picture is of a cherry orchard during picking time.

line to Spokane diverges, and on this the maximum grade is only four-tenths of one per cent. The maximum curvature on the line is only three degrees and the road is built in the most modern, first-class manner, with eighty-five

entrance to Portland for the Northern Pacific from Seattle and Tacoma, thus avoiding the ferry used for more than thirty years, and also affording an entrance for the new North Bank road from the East, are among the largest bridges in this country. They are double tracked throughout.

The Astoria & Columbia River Railroad is a part of the Spokane, Portland & Seattle Railway System, and through that there is an outlet to the Astoria and Seaside resorts in that vicinity, furnishing a very direct route from the interior to the Pacific Coast, which, as population increases, will be a great advent to the seekers after health and pleasure during the Summer season.

The scenery all the way from Lewiston and Clarkston down the Snake and then down the Columbia River is unsurpassed, and the building of this road will bring more forcibly before the public than ever the magnificence of the mighty Columbia River and its tributaries.

The completion of the North Bank road, with its connections with the Great Northern and Northern Pacific, and through them with the Burlington and Colorado & Southern roads, adds greatly to the transportation facilities of the country and places the Columbia River basin and the Inland Empire in much closer touch than ever before with the territory east of the Rocky Mountains, as far as Chicago and St. Louis, and south to the Gulf of Mexico.



NEW HOTEL OF C. P. BALCH, DUFUR, OREGON
Adjoining this hotel is a 65-acre apple orchard two years old, owned by C. P. Balch

HOOD RIVER APPLE GROWERS' OCCUPIES NEW QUARTERS—TEAM WORK BRINGS RESULTS

THE imposing new brick cold storage plant of the Hood River Apple Growers' Union is now ready for business. It is a \$40,000 structure, and a trip through the spacious cooling rooms impresses one with unlimited confidence in the future of Hood River Valley and

Wildman ice machine which is run by a 36-inch Pelton wheel. The 35-horsepower water motor is connected with Wilson's water system, and can be operated day and night at nominal cost. It is the intention of the union to begin the manufacture of ice in the near future.



A. M. LA FOLLETTE'S LOGANBERRY FIELD NEAR SALEM, OREGON

the intelligent and progressive growers who conduct this organization.

The new structure occupies a ground space of 40x150 feet, and this, in addition to the old building of 40x100, will handle the immense apple crop for some years to come. The storage capacity of the building can be better understood when the three floors of the structure, 40 x 250 feet, are taken into consideration. The new building has three loading doors on the railroad side, making five in all, with the two in the old building. The storage is arranged with conveniences for the rapid handling of fruit, frontage room having been provided sufficient to allow for the unloading of six wagons at the same time, while fifteen cars could easily be loaded in a single day of ten hours. The building is lighted with electricity throughout and an electric elevator has been provided for carrying purposes from the first to the third floor.

In the ice manufacturing department there has been installed a Bell-

The plant is capable of manufacturing seven and one-half tons of ice per day, and an ample supply will always be kept on hand.

The Hood River Apple Growers' Union this year completed another \$6,000 apple storage 45x200 feet at Van Horn, in the valley. This institution has 150 feet of loading platform and four loading doors on the railroad. One hundred cars of apples were shipped through that station this year, practically accommodating the entire east side crop. Samuel Campbell is in charge at that point.

The union at Hood River this season shipped 250 carloads of apples. Manager H. M. Huxley informs us that during the busy season the union employs about 200 men.

The success of the Hood River Apple Growers' Union is summed up in the co-operative team work and combined efforts of its members. It is team work that has brought our apples to the highest standard in the world. It is team work that puts our produce before the public in its perfect beauty and draws the nation's attention. It is team work that advertises to the world that Hood River is the apple arena of the West. It is team work that has strangled competition and put Hood River in a class by itself. It is team work that will secure for us cheaper and better shipping service, and the day is past when individual effort will make an apple district great. In team work, private and political business and self-interest must be subordinated to the greater good of the whole. That is why this valley and its interests have never conflicted with individual interests, and the result is that Hood River is advertised as the "Apple City" of the world.—From the "News-Letter."



BETTER FRUIT gets the best from all the best fruit growers and all the best districts.



VIEW OF THE OREGON NURSERY PACKING HOUSE AND OFFICE AT SALEM, OREGON
Their new packing house and office at their new location, Orenco, Oregon, will be over twice the size of their present quarters shown in this cut.

EDITOR'S MISCELLANEOUS NOTES GATHERED FROM DIFFERENT DISTRICTS OF OREGON

IN THIS edition of "Better Fruit," called the Alaska-Yukon-Pacific Exposition Special on account of the exposition being held in Seattle, it seemed proper, inasmuch as "Better Fruit" is devoted to the fruit industry of the Northwest, including the States of Oregon, Washington, Idaho, Montana, Utah and Colorado, that the greater part of the space in a publicity way be given to the exposition and the fruit industry of the State of Washington, which has been the plan and policy pursued in this number. But inasmuch as "Better Fruit" is devoted to the general industry of the Northwest, we in all issues endeavor as far as possible to have something about each state, and furthermore, as Oregon has contributed financially in many ways to assisting in publishing this edition, we feel it only right and proper that some space should be devoted in a general way to the fruit industry in addition to the short articles that appear elsewhere about the State of Oregon.

Oregon is certainly a great fruit state, more celebrated for apples, pears and strawberries than other varieties of fruit grown, for the reason that these three fruits are grown very extensively. Different sections of Oregon produce large quantities of the following fruits, which, by the way, are not mentioned in order with reference to quantity: Apples, pears, prunes, cherries, strawberries, peaches, plums, apricots, grapes, etc. In fact, Oregon produces almost every variety of fruit except the citrus fruits, and what is more, produces an excellent quality of fruit, puts up a fancy pack and realizes topnotch prices. The State of Oregon may properly be divided into several sections. In connection with this article we will mention a few of the more important towns in each district, but inasmuch as our space in this edition, as already explained, is extremely limited on account of the great field and number of subjects that we have to touch upon, little space will be devoted to each. Nearly every city mentioned in the following paragraph has a commercial club and most of the cities have issued publicity booklets, or at least have literature which fully explains what is actually being done in the fruit industry, the possibilities and values of land, and much other information that the Easterner who is thinking of coming to Oregon to locate, would like to know. If any of our readers happen to be interested in the fruit industry, by writing to the secretary of the Commercial Club of any of the following towns and asking for bulletins or literature, the same will be mailed free.

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THE WILLAMETTE VALLEY is the biggest section, extending from Portland to Roseburg, being some two hundred miles in length and from forty to fifty miles wide. In this district are grown all kinds of splendid fruit, as already mentioned. The valley is divided into two sides, the east and the west side. The following cities are the prin-

cipal ones in this valley: On the east side are Salem, Albany, Eugene, Creswell, Oakland and Roseburg. On the west side are Lafayette, McMinnville, Dayton, Dallas, Sheridan, Corvallis, Forest Grove and Hillsboro.

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A FEW YEARS AGO Mr. Tom Richardson came to Portland, Oregon, accepting the position as manager of the Commercial Club and Development League, a stranger to us, but he has made a record by getting results that have not only astonished the people in the State of Oregon, but in the whole Northwest. Mr. Richardson is a publicity man, an optimist, and always wears the smile "that won't come off." He has worked. His results prove it. He is a popular man, well liked by all who know him. He is a man who does things, and

he does things that he believes to be to the interest of the community that he represents and for the interest of the people who employ him. If Mr. Richardson has any enemies we don't know them, but it is only natural that he must have some. It must be expected because it is human nature. The people of Oregon, and of Portland particularly, should congratulate themselves for having been fortunate enough to secure a man like Mr. Richardson, and it is to be hoped that he will continue. He is certainly a capable man in his line of work, and he loves to work for this country because he believes in it.

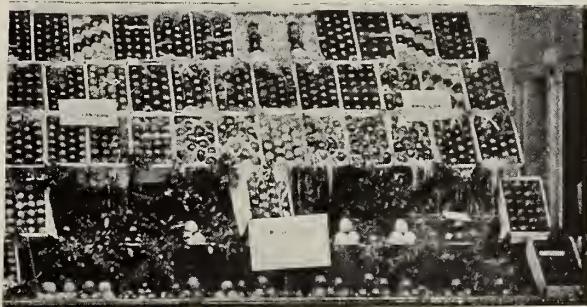
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HOOD RIVER.—"Better Fruit" is published at Hood River, Oregon, which is the home of the editor. Kindly pardon us for just a few words. The valley of Hood River is about four or five miles wide and twenty miles long, and is probably the most restricted of



A. J. DEAR'S EIGHT-YEAR-OLD CHERRY ORCHARD IN BLOOM, OAKLAND, DOUGLAS COUNTY, OREGON

any of the fruit districts in specialties. Only two kinds of fruit are grown commercially apples and strawberries. Of apples only two varieties are grown extensively, the Spitzenberg and New-towns, which comprise ninety per cent of the settings. However, this valley makes a specialty in addition of three other varieties, Jonathans, Arkansas



WILLAMETTE VALLEY APPLE EXHIBIT IN A SHOW WINDOW AT PORTLAND, OREGON

Blacks and Ortleys. Many other varieties do well here, but those mentioned the growers consider their best money-makers. Of strawberries there is only one variety, Clark's Seedling. The number of other kinds of fruit grown in this valley is practically limited to supplying the home trade. Hood River has had so much publicity and is so well known, its fruits being marketed all over the world, that in this issue we feel it our duty to give space in this edition to other districts.

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TH E STATE EDITORIAL ASSOCIATION OF OREGON.—The prime object of this association is to get together in organization every newspaper in the State of Oregon for the purpose of working in harmony for the benefit, upbuilding and improvement of the state. The advantage, without further comment, must be evident to every newspaper man. It is the intention of the association to attend the Alaska-Yukon-Pacific Exposition in a body about the middle of July. Arrangements are being perfected for the excursion, including reduced railroad and hotel rates. George Putman, of Medford, Oregon, has sent out a circular covering this subject. We advise every newspaper man in the state to write to Mr. Putman for further particulars.

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LA GRANDE, OREGON, is located in the Grande Ronde Valley, which is a splendid fruit country, some forty or fifty miles in length, with a number of large apple orchards. Other fruits are grown extensively. The Grande Ronde Valley is a prominent factor among the fruit sections of the state. The principal towns are La Grande and Union.

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WILLIAM McMURRAY, general passenger agent of the O. R. & N. and Southern Pacific, located at Portland a few years ago, but quickly became enthusiastic over the wonderful possibilities of the Northwest section, and it has been his earnest endeavor to promote the development of this country

rapidly and effectively. With this aim in view, he has worked incessantly. His connection with these roads instituted a new era in development work. The Sunset Magazine, in connection with the railroads which Mr. McMurray represents, has adopted a publicity campaign that has never been equaled anywhere in the world for extensiveness and effectiveness.

Every district, every city, every town has been helped by these railroads to place attractive literature among the Eastern people who are seeking Western locations. These railroads have assumed the greater part of the enormous expense consequent upon this work. This is not theory. The number of colonists coming into the territory served by these railroads during the months of March, April and May shows conclusively that Mr. McMurray's work has been well and successfully done. He is one of the ablest publicity men in the railway service.

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OREGON, through the Harriman System, under the able passenger management of William McMurray, in connection with the Sunset Magazine, has had splendid results from publicity work. Through the able efforts of Tom Richardson, manager of the Oregon Development League, wonderful pub-

licity has been given to the opportunities existing in the State of Oregon. This state has been so extensively exploited through the above channels that we feel it the duty of "Better Fruit" to devote the larger part of the space in this issue to other states in the Northwest.

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THE DALLES, WASCO COUNTY.

In and around The Dalles, and particularly the southern part, is a splendid fruit section for the early fruits. The Dalles is especially famous for peaches, cherries and apples. In addition, many other kinds of fruit are grown in this section, including plums, apricots, pears and grapes. The principal towns are The Dalles and Dufur.

◆ ◆ ◆

SOUTHERN OREGON extends from Grants Pass to Ashland. This district is especially celebrated for apples, pears, peaches and grapes, which are grown in abundance. Southern Oregon holds the record for the highest prices on pears ever realized for carloads. The pear and grape industry around Grants Pass is rapidly coming into prominence, for the reason that climate and soil in the surrounding hills are ideal. On the hills near Medford is to be found grape land that cannot be surpassed in the state. Peaches are grown quite extensively, in addition to other fruits, at Ashland. The principal towns are Medford, Grants Pass, Jacksonville, Central Point and Ashland.



PICKING APPLES AT A. D. HELMS' ORCHARD, ASHLAND, SOUTHERN OREGON
NOTED FOR ITS FINE FRUIT, CLIMATE AND SCENERY

BETTER FRUIT

HOOD RIVER, OREGON

OFFICIAL ORGAN OF
THE NORTHWEST FRUIT GROWERS' ASSOCIATION

A MONTHLY ILLUSTRATED MAGAZINE
PUBLISHED IN THE INTEREST OF UP-TO-DATE
FRUIT GROWING AND MARKETING

ALL COMMUNICATIONS SHOULD BE ADDRESSED AND
REMITTANCES MADE PAYABLE TO

BETTER FRUIT PUBLISHING COMPANY

E. H. SHEPARD C. R. GREISEN
EDITOR AND PUBLISHER TRAVELING REPRESENTATIVE
SUBSCRIPTION PRICE \$1.00 PER YEAR
IN ADVANCE IN UNITED STATES AND CANADA
FOREIGN SUBSCRIPTIONS, *Including Postage*, \$1.50
ADVERTISING RATES ON APPLICATION

Entered as second-class matter December 27, 1906,
at the post office at Hood River, Oregon,
under act of Congress of March 3, 1879.

BETTER FRUIT

July

in it. "Better Fruit" fills the bill and does it in bully good shape. Why is "Better Fruit" a success? There are many reasons. The principal one is because the editor and publisher was raised in an orchard and because he is engaged in growing fruit at the present time, and consequently understands the fruit growers' wants.

◆ ◆ ◆

WILLIAM CROSSLEY, of D. Crossley & Sons, apple exporters, New York and Liverpool, expects to visit the Northwest soon. Mr. Crossley is very popular with apple growers and associations, and has the reputation of doing a very successful and satisfactory business with every one with whom he has had business relations.

◆ ◆ ◆

THIS IS A SPECIAL EDITION of "Better Fruit," but we do not wish the reader, who sees this for the first time, to imagine it is an extra large edition. While this edition contains seventy-six pages, we have published an average edition of sixty-four pages from January 1 to date, and during the year 1909 it is our intention to publish an average edition of from sixty to sixty-four pages monthly during the balance of the year. ◆ ◆ ◆

MR. RIP VAN WINKLE FRUIT GROWER, wake up. Learn modern methods if you want to get on quicker and trot in the two-minute class, which means fancy prices and big profits. Subscribe for "Better Fruit."

◆ ◆ ◆

DO YOU still want to grow moss on your fruit trees? Do you still want to grow worms and feed them on apples to make them fat? If you do, go ahead under a slow bell. But if you want to

Portland, Oregon, July 1.
We hereby certify that we have
printed the following number of
copies of "Better Fruit": January,
6,120; February, 9,120; March,
9,120; April, 10,120; May, 9,120;
June, 9,120; July, 14,300.

F. W. Baltes & Company.

grow high-class fruit and get fancy prices you ought to know what to do. In case you don't we will tell you. Subscribe for "Better Fruit" and learn what every orchardist is doing in all first-class districts, who is following modern methods and is progressive.

◆ ◆ ◆

THE first six months "Better Fruit" printed an average edition of 4,000 copies, consisting of 24 pages. The April edition of 1909 consisted of 72 pages of 10,120 copies. This would mean that the April edition was equivalent to 30,000 copies the size of the editions the first six months. Quite a growth, isn't it, in three years? ◆ ◆ ◆

IN EVERY fruit district where there is an association, fruit growers are making money. The stronger the association, the more money the fruit grower makes. ◆ ◆ ◆

BETTER FRUIT makes better men. Better men make better communities. Better communities better their environments. Better environments demand better roads. Better roads make better counties. Better counties demand better schools. Better schools make better children, and better children will make a better state.



"BETTER FRUIT" OFFICES ARE LOCATED IN THE SECOND STORY IN THIS MAGNIFICENT NEW HALL BUILDING, HOOD RIVER, OREGON

ONE COPY of "Better Fruit" contains more valuable, original information and common sense on fruit growing than you get in most horticultural papers in a year.

◆ ◆ ◆

WHY do so many horticultural papers fail to satisfy the fruit grower? Because it is the exception, not the rule, to find an editor and publisher who has ever been in the fruit business or who at present is engaged

EDITOR'S MISCELLANEOUS NOTES GATHERED FROM DIFFERENT DISTRICTS OF WASHINGTON

THIS state has made during the past few years the most remarkable and rapid development of any state in the Northwest. Much credit should be given the Northern Pacific Railroad and the Great Northern, and recently the North Bank, for the splendid work they are doing in upbuilding this splendid state. They have done what few railroads have done before. They spent their money to build their railroads in a country that was practically undeveloped, and then spent money on top of it that was necessary to fill



J. W. GODWIN
Of J. W. Godwin & Co., commission merchants,
Seattle, Washington.

that country with people and make business for their railroads. This is enterprise, and the State of Washington, in our opinion, has much to thank these railroads for. While we would like to speak extensively upon the great varied resources of this splendid state, inasmuch as it is devoted to the fruit industry the columns of "Better Fruit" are too limited to dwell long, but we are pleased to speak of some of the different sections where fruit is grown.

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A. D. CHARLTON, whose picture appears in the upper part of this page, is one of the oldest, most popular and competent railroad men in the Northwest territory. He has been an earnest and able worker for the Northern Pacific and the Northwest ever since he came to this country. His work has been well done. The results are shown in the wonderful development along this road. One thing that conduces largely to Mr. Charlton's successful work, and a feature that is overlooked by many, is that he believes in the country along his road. This is evidenced by the fact that he owns a large orchard, also a large strawberry field, at Kennewick, views of which are shown elsewhere in this edition. In his cherry orchard at Kenne-

wick there are planted 2,200 Bing cherry trees. He also has a large peach orchard. But this is not all. In addition he owns a section of the Horse Heaven country. He has saved his money and invested it in the country along the road that he works for. Success has crowned his investments, proving his wisdom, belief and ability.

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WALLA WALLA DISTRICT.—In the territory adjacent to Walla Walla is an immense area of fruit land which is rapidly being developed. A few years ago a great many orchards were set out in this section of the country, before conditions were quite thoroughly understood by the planters, and the growers did not get the prices that they were entitled to. This district realizes the importance of putting out its fruit in first class condition, which it has been doing the last two years, and now the district is making a record for itself that it can well be proud of.

A great many varieties of fruit can be grown successfully and orchardists are adopting modern methods in every particular and are waging a campaign that is rapidly bringing them to the front.

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CLARKSTON DISTRICT.—The district in and around Clarkston, which is located in the State of Washington opposite the city of Lewiston, Idaho, is a section that is being improved in first class shape as rapidly as any section in the Northwest. This district is blessed with mild winters and ideal summers. All kinds of fruits are grown here successfully, which are sold for fancy prices. This section around the Snake and Clear Water Rivers has long been famous for its magnificent cherries, its luscious peaches, and is making a record for grapes which will compare more than favorably with European grapes. Capitalists have gone into this district very



ALEXANDER D. CHARLTON

Born November 15, 1859, at Hamilton, Ontario. Entered railroad service February, 1876. From that date to January 8, 1877, clerk in auditor's office, Great Western Railway of Canada. June 8, 1877, to February 15, 1884, with the Chicago & Alton Railway, successively in charge of return ticket department and of issuing tickets and rate clerk. February 15, 1884, to date, with Northern Pacific Railway as assistant general passenger agent, located at Portland, Oregon. From the foregoing it will be seen that he has been with the Northern Pacific some twenty-five years. From point of service he is perhaps the oldest employee of the Northern Pacific in the West, and, for that matter, has perhaps been with the traffic department longer than the representative of any other line in this section.

extensively, and the system of irrigation is one of the best that can be found anywhere in the Northwest territory.

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WASHINGTON AGRICULTURAL COLLEGE.—In the June edition we published some very handsome cuts of the Washington Agricultural College at Pullman, Washington, it being our



IN THE ITALIAN PRUNE SECTION OF THE BLALOCK FRUIT FARM, WALLA WALLA,

WASHINGTON

These orchards cover 1,500 acres and are planted to all of the various fruits in which the Walla Walla Valley excels. They are watered by the famous artesian gushers that have recently been bored to depths of approximately 600 feet, and the various wells are flowing from 600 to 2,500 gallons per minute at high pressure.

desire to give this college prominence in a publicity way on account of the great work it is doing. The students' paper of this college kindly loaned us the cuts appearing on pages 32, 33 and 34 of the June issue. The editor of "Better Fruit" being extremely busy at this time of the year managing the Hood River Fruit Growers' Union, which ships the strawberry crop, was crowded, and the matter of credit for these cuts was overlooked. We want to publicly thank the Washington Agriculturist for permission to publish these cuts, and want our readers to understand that we desire they should have the credit for so doing.

♦ ♦ ♦

CASHMERE VALLEY might properly be called a part of Wenatchee Valley, inasmuch as it is a little valley extending back from the Wenatchee district. It is particularly located for fancy fruit, being first class soil with an ideal climate. The system of irrigation furnishes an ample supply of water. Cashmere and Wenatchee apples have been shipped all over the world, and last year these districts engaged quite extensively in shipping to Australia and Europe, as well as supplying the principal markets of the United States. The Cashmere and Wenatchee apples have made a record as prize winners wherever they have been exhibited. It is a beautiful valley, with a lot of splendid, progressive, energetic fruit growers who are not going to be outdone by anybody in the fruit business.

♦ ♦ ♦

SPOKANE AND THE SURROUNDING COUNTRY. The enterprising people in Spokane and the surrounding sections of Kettle Falls, Myers Falls, Arcadia, Attalia, Hillyard, Rockford, Greenacres, Hayden Lake, Dayton, Waitsburg and Pullman were a little bit slow in realizing the splendid fruit growing possibilities of their sections, but quick to act when they did. The irrigation systems were installed with wonderful rapidity. Spokane conceived and carried through successfully the International Apple Show, which was the greatest event that ever happened in history. This show brought this section into

prominence. It is entitled to a good deal more than the limited space we have for any one section in this issue. We regret that we are compelled to be brief, but any further information, also literature explaining the opportunities for fruit growing in these districts, can be obtained by writing to the Commercial Club in any of the cities mentioned.

♦ ♦ ♦

PUYALLUP VALLEY is located on Puget Sound.

The Northern Pacific Railroad passes through it, and it is celebrated for raspberries and blackberries. Other kinds of fruit are also grown there, however, and with splendid success. Out of this valley are shipped more raspberries and blackberries than come from any other district in the great Northwest. The fruit growers are all prosperous and all making big money growing raspberries and blackberries. The yields are won-



PICKING STRAWBERRIES, GOLDDALE, WASHINGTON
Railroad connections with the North Bank Railroad

Club in any one of the above mentioned towns. Such information is furnished free upon request by the Commercial Clubs in all parts of the Northwest.

♦ ♦ ♦

THE WENATCHEE VALLEY.—

This wonderful little valley rapidly jumped into prominence on account of its wonderful fruit within the last few years. It is located on the Columbia River and the Great Northern Railroad goes through the center of the valley, affording splendid shipping facilities to the fruit growers. Carloads of fruit go from Wenatchee straight to all parts of the country. Originally this section was covered with sagebrush, but now comparatively all is set to orchards, composed of five and ten-acre tracts principally, with a few large ones. But these settings are so continuous that it makes Wenatchee Valley appear as one great big orchard of fifteen or twenty thousand acres. The Wenatchee section is composed of several surrounding districts. The principal towns are Wenatchee, Orondo, Peshastin, Malaga, Leavenworth, Monitor, Entiat, Cashmere, Chelan, Hanford, Waterville, Trinidad, Lakeside, Rock Island, Mead and Ferris.

♦ ♦ ♦

ORCHARD SCENE. ARCADIA, NEAR SPOKANE.

A new section rapidly coming to the front for its fine fruit

derful, running four and five hundred crates to the acre. The soil is very rich, and is especially adapted to producing heavy crops of berries and vegetables.

♦ ♦ ♦

OKANOGAN DISTRICT.—This district is located along the Columbia River near Wenatchee. This is one of the great fruit sections of the north central part of Washington, and is rapidly and prominently coming to the front as a producer of fine fruit.

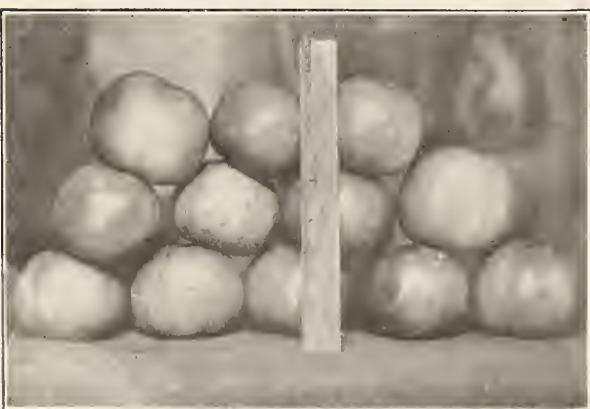
The soil and climate are especially adapted to many varieties. Apples are grown very successfully, apples that are fancy and apples that bring fancy prices. The following are some of the more prominent towns in the Okanogan district: Brewster, Okanogan, Omak, Riverside, Eplex and Twisp. Literature descriptive of the climate, soil, products, and the varied resources of this section can be had by writing to the secretary of the Commercial

ASSOCIATION is a new association composed of all the newspapers in the district east of the Cascade Mountains known as the Inland Empire. They held their first meeting in Spokane for the purpose of organization, which was very effectively carried out at this meeting. They endorsed the work of the Seventeenth National Irrigation Congress, which meets at Spokane August 9 to 14, for the consideration of action on irrigation, drainage, deep waterways, good roads and home building. Every newspaper in the Inland Empire should become a member of this association.

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WHITE SALMON VALLEY AND UNDERWOOD.—

This section is located in the State of Washington, on the Columbia River, just opposite Hood River. The soil and all conditions are strikingly similar. Since the North Bank Railroad went through this terri-



APPLES FROM KLICKITAT COUNTY, NEAR GOLDDALE, WASHINGTON

tory there has been development and activity in this section that has never been surpassed in the development of any other district.

The principal towns are Underwood, White Salmon and Husum. Literature can be obtained by writing the secretary of the Development League in either of the above cities. These districts and Hood River work hand in hand like brothers.

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TH E EASTERN PART OF KLICKITAT COUNTY.—The fruit section of this country is composed of a district around Lyle, one around Goldendale, and one a little further up the Columbia River, known as Goodnoe

Yakima Valley, nearly every section being known by the name of the most prominent town. If the reader is interested in knowing about this valley he can secure literature which will prove interesting and valuable by writing to the secretary of the Commercial Club of any of the following towns: North Yakima, Ellensburg, Toppenish, Wapato, Sunnyside, Granger, Grandview, Mabton, Prosser, Kiona, Selah, Kennewick, Alfalfa and Natchez.

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OUR greatest regret is that we have not more space to devote in this edition to each and every one of the different sections of the State of Washington, but our space is limited. We believe, however, that this edition of "Better Fruit" will do much to convince those who are engaged in the growing of fruit that the Northwestern part of the United States is the greatest fruit country in the world. To the Eastern reader who feels interested in fruit growing we would suggest, if he wants more detailed information, that he address the secretary of the Commercial Club in any one of the cities mentioned in this article, who will be glad to furnish him with literature descriptive of the climate and resources of the Northwest which will be found highly interesting.

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TH E EDITOR and publisher of "Better Fruit" assumes no particular amount of credit for its popularity and its powerful influence, otherwise

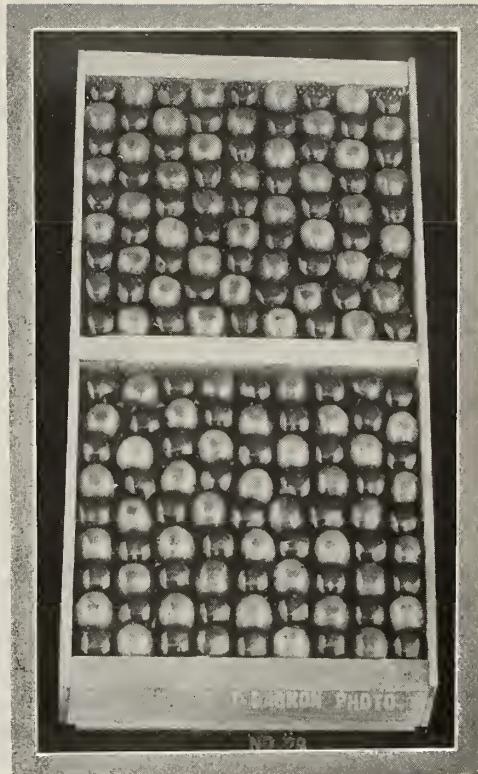


Photo by T. Gagnon

FANCY PACKED BLACK REPUBLICAN AND ROYAL ANNE CHERRIES
From Wenatchee, Washington, making a very beautiful effect.

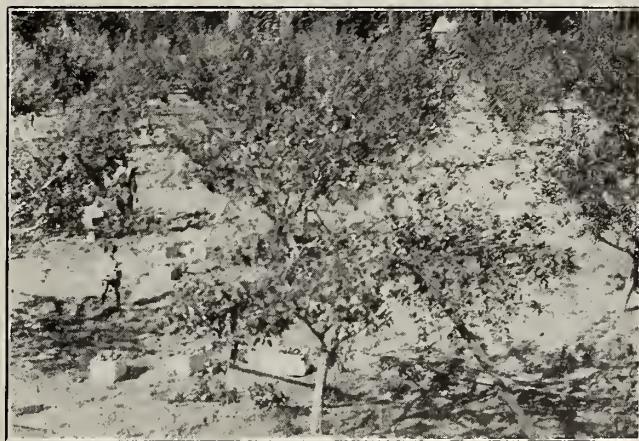
than to have been quick to follow, comprehend and realize the desire of the fruit grower to better his condition.

◆ ◆ ◆

WH O wants to grow better fruit?
Nearly every fruit grower.

Who wants to get better prices?
Every fruit grower.

How can every fruit grower do both?
By subscribing to "Better Fruit."



APPLE ORCHARD OF DR. M. F. SHAW, UPPER HOOD RIVER VALLEY, OREGON

Hills and Nutland Hills. Cliffs is the main town of the Goodnoe Hills and Nutland district. The North Bank Railroad runs through the southern section bordering on the river, with a branch line to Goldendale. Literature can be obtained by addressing the secretary of the Commercial Club in any one of the cities mentioned.

◆ ◆ ◆

TH E YAKIMA VALLEY is the largest and perhaps the oldest fruit district of great prominence. The settlers of this valley, which was originally sagebrush and prairie, have put in canals and put water on their land, and wherever they have put water on the land they have met with success. Along the canals are to be seen orchards, strawberry fields, pastures and vegetable gardens that would please the most critical eye. But this is not all. They have made the land that was not worth seventy-five cents per acre so productive that today irrigated land in Yakima Valley for growing fruit and garden vegetables varies all the way in value from \$100 to \$2,000 per acre, according to various conditions. People are prosperous. All of the fruit growers and farmers that are located in this wonderful Yakima Valley are making money. Many of the early settlers are already wealthy. There are a great many different districts in the



ORCHARD SCENE AT EPLEY, WASHINGTON, IN THE SPLENDID OKANOGAN COUNTRY

PRIZES FOR CHERRIES AT A.-Y.-P. EXPOSITION

THE growers generally do not appreciate the fact that in the State of Washington we grow varieties of cherries that can be shipped to the Chicago market without refrigeration, and the Eastern buyers do not know that from our growers they can obtain a continuous supply of cherries from June until October.

In order that this branch of fruit growing may be given the prominence it deserves, the state will undertake to carry a continuous exhibit of cherries from June to October, and to feature berries, grapes and other fruits in their booth at the Alaska-Yukon-Pacific Exposition. If by these means we can open a new market for any of your fruits, we think the return to growers will be such as to warrant your best efforts in assisting us to successfully carry out the plan outlined above by securing fruits in your district for this exhibit.

To encourage shipments, the state will offer \$25, \$15 and \$10 for the best exhibits sent us from any county or district at any time during the month of June, and like awards for each month of the exposition. These exhibits may include cherries, berries, grapes, plums, apricots, peaches and pears, any or all of them, but we are especially anxious to have cherries sent in.

In addition, the state will make entry in the name, if given, of the grower, so that his part of the exhibit may have a chance to win one of the medal awards of the exposition. To win a medal award the grower may, if he prefers, send parts of his exhibit at different times during the season. Credit will be given him for each separate shipment. This plan will give each county a chance at some time to show the fruits of their district in their season.

Please confer with others interested and advise us what you think we may expect from your district. We cannot do anything without your assistance.

Shipments should be made to W. A. Halteman, executive commissioner for state booth, Alaska-Yukon-Pacific Exposition. Transportation will be paid here by the state.

We will also offer prizes different weeks during the season for the best five plates of some one variety of apples, and the following week a prize for some other variety of apple or fruit, and for the largest apples, and for grains and vegetables.

I will be glad if you will send me the names and addresses of growers who might be interested in this and who would be likely to assist us. Very truly yours,

A. L. Smith, Superintendent,
Seattle, Washington, May 6, 1909.



NUTLAND HILLS ORCHARD LANDS.—This property is situated on the "North Bank" Railroad in Klickitat County, Washington, about 125 miles east of Portland. The soil, known as "Columbia River lava soil," is very deep, rich, warm and loose, and exceedingly rich in inorganic mineral matter such as

potash, lime, disintegrated basalt, volcanic ash and lava silt. Its texture is very fine and even grained, nearly like flour, easily worked and having but little clay, never turns over in clods, and does not "bake" or crack open, allowing the moisture to escape.

This land is specially adapted to growing almonds, apricots and peaches, also Tokay, Muscat, Malaga, Black Hamburg and other varieties of European grapes, as well as watermelons.

About 4,000 acres of this land has been secured by the East Goodhoe Nutland Company of Portland, Oregon, which is subdividing and selling it on the installment plan, planted and cultivated for three years until the orchards come into bearing, or will sell unplanted, as purchaser prefers. The land is all cleared

ready to plant, a large part of it being planted to wheat this season.

They have placed it in the hands of The Jacobs-Stine Company as selling agents. This firm is the largest realty operators on the Pacific Coast. They had the beautiful birdseye view of the property made which appears on the outside cover of this issue, half-tone copies of which, as well as the "Nutland Booklet" describing the property and giving complete terms of sale, prices, etc., may be had by addressing The Jacobs-Stine Company, 148 Fifth street, Portland, Oregon.



BARNUM, the circus man, once said: "The American people like to be humbugged." You can catch them very quickly with a humbug, but you cannot hold them. It takes time to win on merit.

A WORLD MARKET FOR NORTHWESTERN APPLES

MODERN MARKETING METHODS

REGARLESS of the wide reputation of Northwestern apples, it is surprising how little known they are in many of the smaller sized markets of this country. The superior quality of the Northwestern apples places them in a distinct class, and the demand for such a product is susceptible of tremendous increase, provided the proper facilities are employed in the advertising, selling and distribution.

It is a fact that during the early development of the apple industry in the Northwest, New York, Chicago and other similar large cities were the principal markets used, and at that time there was no particular need to broaden the outlet. At the present time, however, a broad distribution is needed, and no grower of apples should be content with anything less than the top value for his fruit. He should retain a keen interest in the establishing of a permanent trade for his particular brands.

A very interesting and important feature of the apple selling business was emphasized during the past apple season by Crutchfield & Woolfolk, the well-known sales agents and distributors. By the aggressive work of their sales department a demand was created and developed in sections of the United States which have heretofore handled practically none of the Northwestern apple crop.

In the wealthy centers of every state in the Union a demand exists for strictly high grade fruit, and many of the buyers became enthusiastic in their praise of the Northwestern apples. In many cases the orders booked by Crutchfield & Woolfolk represented the first introduction of this fruit in these cities. Duplicate orders naturally resulted and in the handling of a very large volume of business Crutchfield & Woolfolk were able to so regulate the sale and distribution of this fruit that the competition was raised among the buyers in bidding for the fruit instead of between the shippers in seeking the markets.

A world market for Northwestern apples means something more than the

shipping of the fruit to distant points. It means the development of a highly profitable demand in the smaller markets and frequently out-of-the-way cities, where a fancy article is appreciated. A development of foreign demand can be properly accomplished where proper facilities exist.

Crutchfield & Woolfolk stand foremost in the business as marketing agents for fruits. They operate in every state in the Union, with foreign branches, and the immense volume of business they handle each year places them in the most intimate touch with the trade and its requirements. They sell every class of fruit, tropical, northern, citrus and deciduous. They seek out the markets and buyers which many competitive concerns are not familiar with. A thorough and intimate knowledge of the marketing methods and detailed operation of every fruit selling organization of prominence in existence has enabled Crutchfield & Woolfolk, with their immense business, to build up during the past ten or twelve years a selling organization which, when judged by results obtained for the shipper, stands without a peer. Any fruit shipper or association desiring information concerning results on Northwestern fruit handled by Crutchfield & Woolfolk during the past season is requested to write to them at their executive offices, Pittsburg, Pennsylvania, for particulars. They will also receive a booklet on f.o.b. selling and distribution, which will prove interesting. The growers of the Northwestern district should avoid speculating with their fruit and should co-operate with such a selling agency as the above in giving their fruit a permanent reputation and established demand. In this way there is no uncertainty about the placing of their fruit each year on a satisfactory f.o.b. basis.

The above firm will be personally represented in the apple district and they would like to have the names of all shippers who would be interested in having details of a definite and satisfactory business proposition.

Write them at Pittsburg.

BUSINESS MEN RETURN FROM WASHINGTON

[BETTER FRUIT SPECIAL CORRESPONDENCE]

Portland, Oregon, May 17, 1909.

After a whole week spent in touring Washington points, the special train of Portland business men pulled into the station Saturday night with excursionists intensely enthusiastic over a trip that will be discussed in the Portland Commercial Club and about town for a long time to come. Never were hosts more hospitable than the Washington communities, never was good fellowship more prevalent, never did entertained and entertainers realize more thoroughly the community of their interests in the development of the Pacific Northwest. The marvelous activity and prosperity of the whole State of Washington was a constant source of comment to the Oregonians—and they had expected much. The ovations extended to the visitors everywhere were marked by a genuineness and heartiness seldom equaled on such occasions. An inspection of the exposition made every Oregonian a "rooter" for the A.-Y.-P.

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Visitors to the Pacific Northwest from any other portion of the United States are always impressed with the wonderfully luxuriant vegetation west of the Cascade Mountains. It keeps them busy saying, "Why, we cultivate the syringa as a shrub at home. Here it grows wild. And those ferns, which seem to do their growing in your winter woods here, at home we would only have them in greenhouses." The rhododendrons of Yaquina Bay are

famous even in Oregon, and special excursions are being run to Newport to see this gorgeous flower at its best.

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NO CLASS is more deeply interested in Oregon than the high grade office man of the East, who fully appreciates the exceptional investment opportunity that exists in this state. Probably fruit tracts are the most popular, at least if the following quotation from a letter written by the department manager of one of the largest packing houses in Chicago to an Oregon friend can be taken as an index:

"I am certainly appreciative of the literature pertaining to your grand country. I am receiving more mail than our whole department. Many of our clerks have the fruit bug in their ears, and when they hear of any one receiving 'dope' along this line they pounce upon it like a pack of hungry wolves would on a carcass. If I should answer all the inquiries I have had during the last few days I would have to have an expert stenographer."

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OREGON is not so far from the Atlantic Coast as it was. Within a few days a through train service will be put on between Portland and New York City, covering the entire distance in thirty minutes less than four days. Thoroughly informed railroad men consider that it will be a long time before this remarkable schedule is bettered.

WHAT SUBSCRIBERS SAY ABOUT BETTER FRUIT

Santa Rosa, California, December 4, 1908.
Better Fruit Publishing Company:

Dear Sirs—I take pleasure in thanking you for your splendid gift of copies of "Better Fruit" for December. I will have these distributed where they will do good. Faithfully yours,

Luther Burbank.

Borringe Klosters trädgård, Sweden,
December 28, 1908.Better Fruit Publishing Company:
Dear Sirs—Please send me a specimen copy of "Better Fruit," including subscription rates to foreign countries. Sincerely yours,

Aug. Wickmann.

Medford, Oregon, December 17, 1908.
Better Fruit Publishing Company:
Dear Sirs—Your last number was the best you have yet gotten out. Very respectfully yours,

Charles Meserve.

Portland, Oregon, November 18, 1908.
Mr. E. H. Shepard, Editor "Better Fruit," Hood River, Oregon.

Dear Mr. Shepard: Here's a little story you will appreciate. It happened at the Portland Public Library a few days ago.

Visitor: Have you the magazine called "Better Fruit"?

Librarian: Here is the file; you will find the current number in the reading room.

Visitor: Oh, I don't care for the currant number; I only want to see the apple number.

Very truly yours,

L. A. Coddington.

Louisiana, Missouri, November 5, 1908.
Better Fruit Publishing Company:

Gentlemen—"Better Fruit" received, and, as usual, it is a beautiful number. Yours truly,

William P. Stark, Stark Bros. Nursery.

New Plymouth, Idaho, November 26, 1908.
Better Fruit Publishing Company:

Dear Sirs—Please continue sending "Better Fruit." It's an interesting, live, up-to-date fruit paper, and I can't pass it up. Yours truly,

F. H. Cross.

Creston, British Columbia, November 30, 1908.
Better Fruit Publishing Company:

Gentlemen—I wish to thank you for sending me a copy of your publication in reply to my inquiry and to compliment you on the handsome appearance of "Better Fruit." Yours truly,

James Cooper.

Hayre, Montana, November 26, 1908.
Better Fruit Publishing Company:

Gentlemen—Your paper has been referred to me as a standard publication bearing on fruit raising, orchards, etc. Please enter my subscription on your books. Yours truly,

F. S. French.

December 24, 1908.

Better Fruit Publishing Company:
Dear Sirs—Please send "Better Fruit" for one year to Eric W. Thornley, High Clerc, Ightham, Kent, England. Yours truly,

Michael Harris.

Milwaukie, Oregon, January 16, 1909.
Better Fruit Publishing Company:

Dear Sirs—"Better Fruit" is certainly the fruit paper par excellence. Sincerely,

James L. Duffy.

WASHINGTON NURSERY COMPANY
Toppenish, Washington, February 11, 1909.
Better Fruit Publishing Company:

Gentlemen—Please send us twelve copies of Volume 8, No. 3, containing the account of the national Apple Show.

We want to compliment you on the most thorough and complete manner in which you have both illustrated and reported this exhibition. It is not only a credit to yourself, but a wonderful help in the promotion of similar exhibitions.

Yours very truly,
Washington Nursery Company.

Pullman, Washington, January 22, 1909.
Better Fruit Publishing Company:

Gentlemen—I consider your paper so valuable that I want every one of our fruit growers to have it.

Yours very truly,
W. S. Thornber,
Professor of Horticulture.

Colorado Springs, Colorado, January 18, 1909.
Better Fruit Publishing Company:

Dear Sirs—Please send "Better Fruit," the best of its kind ever read, to the following addresses. Wishing you success and congratulating you on your splendid publication, I am, very truly yours,

Charles B. Hall.

Irrigon, Oregon, January 14, 1909.
Better Fruit Publishing Company:

Gentlemen—Kindly commence my subscription to "Better Fruit" with the December, 1908, number, sending me both the December and January numbers, either of which is worth many times the price of a year's subscription. Yours truly,

Clyde E. Niles.

Galena, Montana, January 16, 1909.
Better Fruit Publishing Company:

Gentlemen—in December I subscribed for your magazine, which, permit me to say, has given me as a fruit grower more practical suggestions from two copies received than I have been able to dig from three years' reading of so-called "specific" works on the subject. Respectfully yours,

J. E. Wolf.

Clayton, New Mexico, January 19, 1909.
Better Fruit Publishing Company:

Dear Sirs—Please send me "Better Fruit" for one year, and oblige, yours very respectfully,

Guy M. Salisbury.

Corvallis, Oregon, January 20, 1909.
Better Fruit Publishing Company:

Enclosed is one dollar for "Better Fruit." You should cut us lazy fellows out and not waste postage on us; then we would be after you for back numbers fast enough, as we cannot get along without "Better Fruit." With best regards, I am, yours truly,

George Armstrong.

Attalia, Washington, January 16, 1909.
Better Fruit Publishing Company:

Dear Sirs—I think "Better Fruit" is the best journal published of its kind I have ever seen.

Yours truly,
W. J. Ingraham,
Tuxpan, Territory de Tepic, Mexico.

January 11, 1909.
Better Fruit Publishing Company:

Gentlemen—Please send one number of your paper, "Better Fruit." Thanking you in advance, I beg to remain, your truly,

Adolf Ludecke,

Glen Lea, Colwood, British Columbia,

January 24, 1909.
Better Fruit Publishing Company:

Dear Sirs—Please find enclosed one dollar, my renewal to subscription to your exceedingly good paper. Compliments of the season and long life and prosperity to your "Better Fruit." You are doing good work. Sincerely yours,

George Heatherbell.

Vashon, Washington, January 6, 1909.
Better Fruit Publishing Company:

Dear Sirs—I enclose one dollar for "Better Fruit" for 1909. It is beautifully gotten up and invaluable to the fruit grower. I prize it very highly. Yours truly,

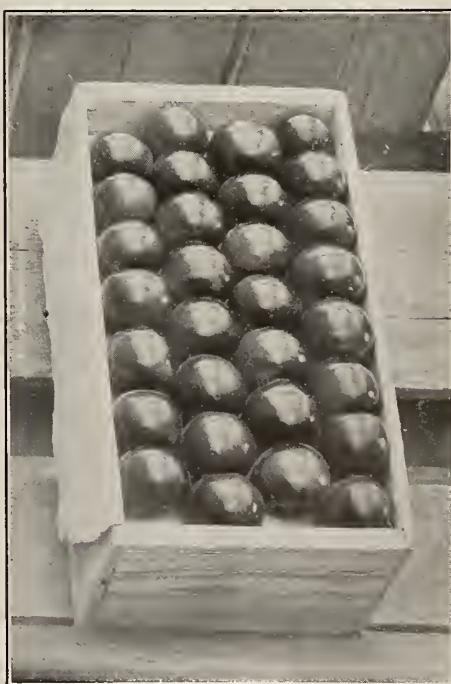
W. E. Bates.

Kraksin, January 9, 1909.
Ich bitte, senden Sie uns Ihre werte Zeitschrift zur Ansicht. Hochachtungsvoll.

Dr. Stanislaw Golinski,
Gartenbauinstructor fur West-Galizien.

◆ ◆ ◆

IN LIFE it is worry; it is not work that kills. In fruit growing it is ignorance and neglect that causes failure. Knowledge and application spell success. Nothing but "Better Fruit" is good enough for the fruit grower of the Northwest. This includes Colorado, too. They are a progressive bunch.



THE CELEBRATED DIAGONAL PACK OF THE FAMOUS HOOD RIVER APPLE

Hood River Spray Mfg. Co.
Hood River

Medford Spray Co.
Medford

Oregon Spray Co.
Portland

THESE FACTORIES MAKE AND DISTRIBUTE THE FAMOUS

NIAGARA Lime-Sulphur Spray

The leading fruit growers and fruit growers' associations of the Northwest use NIAGARA exclusively

THERE IS A REASON WHY

NIAGARA is made under special process originated by ourselves. The only known process by which is made a permanent, clear and reliable solution of lime and sulphur of sufficient strength to meet all requirements.

WRITE FOR FURTHER INFORMATION

WHEREVER FRUIT EXCELS *Niagara Spray* IS USED

WHAT "THE STREET" OF SEATTLE MEANS TO THE GROWER

BY J. B. POWLES

Believing that it might be of interest to your readers to know something about the commission business, as carried on in Seattle on what is known as Western avenue (or frequently called "West street"), will state I have been on this avenue now close on to twenty years.

I have watched the business grow from that handled by a few houses up to the present time there are something like thirty-five houses in business. These houses handle fruits and vegetables almost exclusively.

The business is done here very largely on consignment. The first house on the street to make any marked success of the handling of fruit and vegetables on consignment was the old house of J. M. Hixon & Co. Most of the older merchants and fruit shippers knew the old gentleman, after whom the house was named. The Company of

this firm was Walter Bowen. Walter Bowen is still in business here, known as Walter Bowen & Co., still carrying out the lines laid down by the old gentleman, viz., on consignment only.

Time has proven the conclusions of some of the late comers on the Avenue to be correct, namely, that no house can expect to be prepared to handle business as it comes to him unless he operates both on the consignment and the purchase plan. On the other hand, it has always been my contention that to make an assured success of business, one must pay special attention to the handling of consignments on a strictly honorable basis. Time has proven that the house or houses which handle goods honestly remain in the business and grow up with the street. On the other hand, we have noticed that those houses who through incompetency, lack of attention, from dis-

honest motives, or by hiring and working inferior help, thereby not being able or willing to remit the grower a just return for his shipments, are of short life.

It would be unfair for us, in this article, to attempt to name the houses which come under the different heads. And as the houses have gone out of business, there is no one concerned in knowing it.

We have always contended that the best possible recommendation a commission merchant could have as to his honesty and success is the age of the house; on the principle that the dishonest dry up and pass out, while the honest continue serving the grower.

A great many times in the last few years the merchants of Western avenue and the association which we support have been very heavily attacked

TEN ACRES SOLD

I have sold the 10 acres I advertised in the last issue of "Better Fruit" at \$100.00 per acre. I will sell 10 or 20 acres more, so as to enable me to set the remainder to orchard. This land is worth \$150.00 per acre. That is what adjoining land is selling for. It went quick because the price was too low. I will take \$125.00 per acre up to August 1. After that I will want \$150.00 per acre. This 40-acre tract for apples can't be beat. It is at Underwood, in the White Salmon Valley, one and one-half miles from the railroad station, and is situated on the Columbia River just opposite the famous Hood River Valley.

C. R. GREISEN

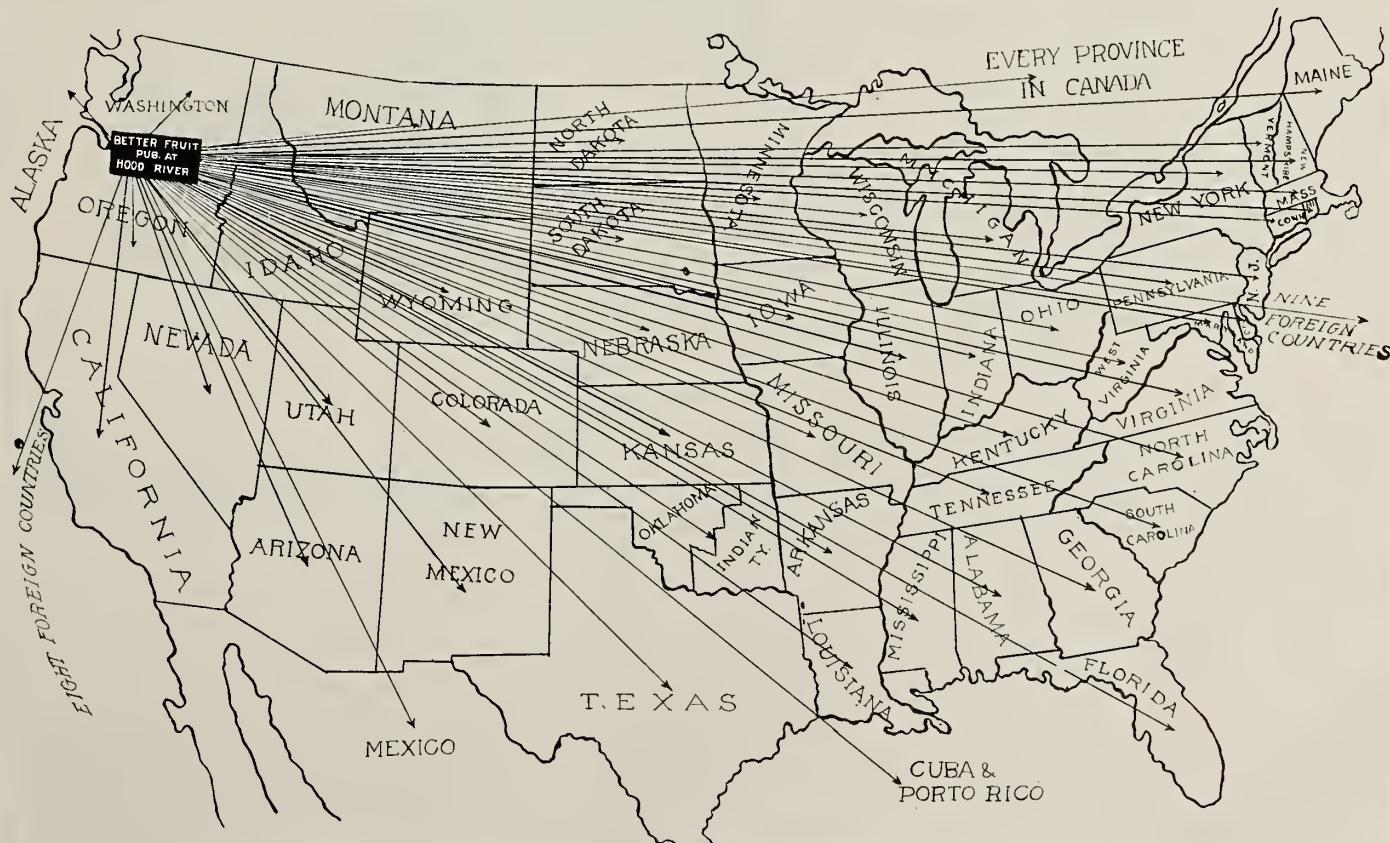
Hood River, Oregon

BETTER FRUIT THE BEST FRUIT GROWERS PAPER IN THE WORLD

PUBLISHED AT HOOD RIVER, OREGON

ONE DOLLAR PER YEAR IN ADVANCE

Subscription April 1, 1909, \$0.10 Circulation 10,000 Circulation of July Edition, 14,300



by the press of this city. But I am pleased to state that in every instance without any foundation of truth. The attacks were simply made for ulterior purposes.

The firm of which I am the head, namely, J. B. Powles & Co., is the outgrowth of the old firm of J. W. Godwin & Co. Some five years ago, we two who had worked together some ten years, separated. At that moment the writer put into effect a plan which he suggests to others that it might be worth their while copying. This plan was nothing more or less than a cooperative plan worked out in the following manner:

The new firm is incorporated for \$40,000, capital fully paid. New heads of departments were created and with each head of department a contract was entered into by myself, whereby a certain percentage of stock was set to one side for them, the stock to be paid for out of the earnings of the company.

In the course of time, this stock became fully paid, was delivered to each of the five persons participating in the division, namely, J. W. Watson, L. W. Stanley, R. H. Williamson, Fred Robinson, and one other, who, at this time, is not in our employ nor yet a member of the company, whose stock in turn was taken and divided with two others of the employees. But in this instance it was sold for cash at its face value.

You can readily see that during the interval of time that the stock was being paid for the house had the full strength of each of the parties named, and it was only a matter of time when the machine was built up, and, in my judgment, cannot be beat on the Pacific Coast. There may be others who do a larger business, but not a more generally successful business than we do.

Business, as handled here on the Avenue, is handled very differently to any fruit shipping point we know of. It is a well recognized fact in California, that in the lines of fruit that are handled here out of that state, that Seattle demands and gets and pays for the best goods the country produces. The same applies to the producing sections of Oregon and Washington. The reason we are compelled to handle the best the country produces is simply because we ship to points at such distance that we know of no city anywhere that has the same problems to handle and the same service to render.

It is not an uncommon occurrence for us to put up all of the leading vegetables and a number of the fruits to be sent off on trips, going as far as six hundred miles north of the Arctic Circle, on journeys at times lasting thirty-five to forty days. In fact, some of the shipments that are made in April do not reach their destination until after the middle of June.

Bananas, one of the most tender fruits that we handle, one which the New York importers expressed surprise at even getting the fruit to Seattle in good condition, we, in turn, are packing out every week during the summer months that go to Nome, Dawson and Fairbanks. And we succeed in getting them there in good condition. This, no doubt, will be a great surprise to some of the readers of this article.

We oftentimes ship watermelons, cantaloupes and sweet potatoes to Fairbanks and we figure on twenty-two to twenty-six-day journeys, going north on the steamer to Skagway, over White Pass by railroad, down the mighty Yukon to the Tanana River, then up the river to Fairbanks.

Apples, the Winesaps in particular, raised in the Hood River section in the so-called Yakima and Wenatchee sections, we ship into that country and they keep, holding up in good condition until August.

Late shipments of potatoes, onions, lemons, apples, and all the root vegetables are shipped into the mining towns of the North arriving at Fairbanks during the early part of September and at Nome the early part of October, and are held over until the following June so as to supply the homes, hotels and restaurants with the fresh articles.

It is needless for us to state that only the very best that is produced can be handled as these fruits and vegetables have to be handled and held

A Box of Apples, 96 size, sells for \$3.00
A Box of Apples, 128 size, sells for \$2.00

Difference, \$1.00

A Gain of 50% By Using
Thinning Shears

This is the most practical pattern on the market today and used exclusively by Hood River Orchardists. Price 45c each, postpaid, or \$4.50 per doz., express collect.

Franz Hardware Co. Hood River, Oregon
Distributors Pacific Northwest

Place your orders early



Largest Seed House in the West

LILLY'S BEST SEEDS

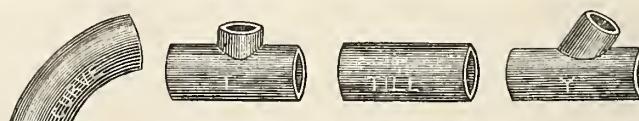
Established 1885

We Make a Specialty of
SPRAYS
Our Lime & Sulphur
Solution is 99% Pure

PRINTING FOR FRUIT GROWERS

Our facilities for the prompt handling of out-of-town orders, together with the high-class service we render, makes this a good place to buy Printing. *Better Fruit* is designed and printed in our establishment. Long Distance Telephone Main 165.

F. W. BALTES & CO.
FIRST AND OAK PORTLAND, OREGON



WRITE US FOR PRICES ON

DRAIN TILE

All sizes from 3 to 24 inches. In small or carload lots. Also
Sewer, Chimney, Water and Culvert
Pipe, Pipes for Septic Tanks, Etc.

ALL OF OUR CLAY PRODUCTS ARE OF THE VERY BEST QUALITY

Oregon & Washington Sewer Pipe Co.
41 NORTH FRONT STREET PORTLAND, OREGON

CAPITAL STOCK \$100,000 SURPLUS \$20,000

FIRST NATIONAL BANK

HOOD RIVER, OREGON

F. S. STANLEY, President
 E. L. SMITH, Vice President
 E. O. BLANCHARD, Cashier
 V. C. BROCK, Assistant Cashier

ASSETS OVER \$325,000

Savings Bank in connection

over for the long six or eight months of winter. We are fortunately situated here, so much so that business can be done at the lowest possible expense and with the greatest possible dispatch.

The business on Western avenue for the last twenty years has been done in corrugated iron buildings; but now that the property is passing into the hands of the merchants, either by lease or purchase from the railroad companies, permanent improvements are being put up, and the houses are being especially designed for the better handling of our business.

I believe that, without fear of contradiction, I can make the statement that the houses who are members of the Seattle Produce Association are the most honorable class of men that follow this business in any section of the country. We are all working under a great disadvantage, a condition which almost forces a merchant to take from the shipper more than his rightful dues, namely ten per cent, for the handling of his consignments.

The increase in expense on account of handling the business during the past eight years has been fully thirty-three and one-third per cent, and as the goods are still handled on a ten per cent commission, the only factor which has helped to carry us out with a fair margin of profit is the increased volume. Take the item of rents alone: The building which we occupy, eight years ago rented for \$85; the rent now is \$600. This is one of the factors which is compelling the commission merchant to put up his own buildings, so as to be the landlord as well as the merchant.

At the present time, we are all preparing for the heavy business which we anticipate this coming summer season. We have had several new houses start here in the last year for the purpose of enjoying some of the fruits of the influx that is expected. This increase in competition may or may not be justified, but if, perchance, the growth has been too rapid the increased population of our city with the opening up of our country with the continued increased demand from Alaska will easily bring things to the normal level.

One of the most interesting features which has happened in the fruit lines during the last few years was that successful apple show at Spokane, at which show your Hood River friends were conspicuous for their absence; at least, as far as their display and the competition which they would naturally create is concerned. At the next apple show in Spokane, I strongly urge the Hood River people to jump into the competition regardless of everything and make the second apple show even a greater success than the first one was.

LADD & TILTON BANK

ESTABLISHED 1859 Oldest Bank on the Pacific Coast

PORTLAND, OREGON

Capital Fully Paid	\$1,000,000
Surplus and Undivided Profits	\$500,000

Officers:
 W. M. Ladd, President
 Edward Cookingham, Vice President
 W. H. Dunckley, Cashier
 R. S. Howard, Jr., Assistant Cashier
 J. W. Ladd, Assistant Cashier
 Walter M. Cook, Assistant Cashier

INTEREST PAID ON TIME DEPOSITS AND SAVINGS ACCOUNTS

Accounts of banks, firms, corporations and individuals solicited. Travelers' checks for sale and drafts issued available in all countries of Europe.

LESLIE BUTLER, President
 F. MCKERCHER, Vice President
 TRUMAN BUTLER, Cashier

Established 1900
 Incorporated 1905

Butler Banking Company

HOOD RIVER, OREGON

Capital Fully Paid \$50,000 Surplus and Profits are \$30,000
 INTEREST PAID ON TIME DEPOSITS

We give special attention to GOOD FARM LOANS
 If you have money to loan we will find you good Real Estate security or if you want to borrow we can place your application in good hands and we make no charge for this service

THE OLDEST BANK IN HOOD RIVER VALLEY

In making reference to this lack of representation by the people in your section, I do not know whose corns I am treading on. But it makes no difference. Forget the past, drive the best bargain you can on terms, and help to make the show a success; or, in other words, a true representation of the abilities of the Pacific Coast states to produce, to grade and to pack apples in such a way and in such a manner that none can equal.

It certainly looks as though the future has in store for the states of Oregon and Washington a great market for its apples. The orange industry of California has, for a number of years, been widely advertised and to a degree of success, that it looks at the present time that the apple

Cupid Flour

Has same standing in the Flour Trade that Hood River Apples have in the Fruit Trade. Made by
HOOD RIVER MILLING CO.

W. F. LARAWAY

DOCTOR OF OPHTHALMOLOGY

EYES TESTED LENSES GROUNDED

Over 30 Years' Experience

TELESCOPES, FIELD GLASSES
MAGNIFIERS TO EXAMINE SCALEHOOD RIVER, OREGON
AND GLENWOOD, IOWA

S. E. Bartmess

UNDERTAKER AND
LICENSED EMBALMER

For Oregon and Washington

Furniture, Rugs, Carpets
and Building Material

Hood River, Oregon

Hood River Banking & Trust Co.

We own and occupy the finest equipped and most modern bank in Hood River County. A general banking and trust business transacted. Safe deposit boxes. Interest paid on time and savings deposits. Make our bank your headquarters when in Hood River. Correspondence and your patronage solicited

Chas. G. Pratt, President
 J. H. Osborne, Vice-President
 R. W. Pratt, Cashier
 M. M. Hill
 Wilson Pike
 C. H. Stranahan

The PARIS FAIR*Hood River's Largest and Best Store***DRY GOODS****SHOES, CLOTHING**

We are offering some extra specials in our Clothing Department. Ask to see them

Try a pair of American Lady \$3 & \$3.50 Shoes or American Gentlemen \$3.50 & \$4

Things we are Agents for

KNOX HATS

ALFRED BENJAMIN & CO.'S
CLOTHING

DR. JAEGER UNDERWEAR

DR. DEIMEL LINEN MESH
UNDERWEAR

DENT'S & FOWNES' GLOVES

BUFFUM & PENDLETON

311 Morrison Street, Portland, Oregon

producers of this state have a much brighter future than the orange producers of California have. And this future can be hastened and its benefits encouraged in no way better than by the competition of the different sections coming together on exhibition at the next world's apple show at Spokane.

A great deal has been said by the press about the tremendous profits that are made on the fruits as between the producer and the consumer. These statements have tended to encourage the bringing closer together of the parties mentioned. If, in certain sections of the country, it should be a fact that the retailer makes enormous profits out of the fruits handled, it is certainly not a fact in this town.

Several years ago, our papers took up the establishing of a market place, and got the people worked up to that point where they really believed that when they went to market they were buying not only direct from the producers, but taking business away from the commission merchants. Those who are well posted know this is not a fact. The market is, to a certain degree, a dumping ground or, in other words, a point upon which the commission merchant unloads the commodities which he gets long on. We believe, though, that the market has the effect of putting more fruit into consumption than can be disposed of through the regular channels and notwithstanding the fact that the commission merchants have been accused time and time again of being antagonistic to the market, we have nothing to fear from it. In fact, have at all times benefitted by the establishment of the market. If there has been any injury done at all, it has been done to retail merchants. But if there has been an injury, we have not had it drawn to our attention.

I mention these facts for the reason that it is firmly of my belief and the belief of others that the commission merchant fills a place which no one can fill, and at the same time, serve the grower and the public better than they are being served.

With the new railroads centering into our town, there are bound to be new fruit producing centers brought into existence. Therefore, the question of what is best for the new sections to produce is a very important question. But this is a question which your valuable paper must answer for them. If any questions arise in the minds of your subscribers, to which questions my firm can help you to reply, either as regards the varieties to produce, how they should be packed and when they should be marketed, you will kindly call on us and we shall make it our special business to give your readers the benefit of our thoughts and observations.

Stranahan & Clark**DEALERS IN**

**Commercial Fertilizers
Land Plaster, Lime
Plaster Paris, Cement
Building Plasters**
Hood River, Oregon

**OLDEST LIVERY COMPANY IN
THE VALLEY**

**TRANSFER &
LIVERY CO.**

**Special Attention to Commercial
Men, Camping & Fishing Parties**

TELEPHONE MAIN 131

HOOD RIVER, OREGON

Gibson Fruit Company

Not Incorporated

131 SOUTH WATER STREET

CHICAGO, ILLINOIS

Great Central Market

We specialize in fancy Pacific Coast and Northwestern fruit. We are general distributing and Eastern marketing agents for some of the largest associations and shippers in the Northwest. We make a specialty of selling f. o. b. in transit or delivered, whichever way will realize best results for the shipper.

If you have not already arranged for the disposition of your shipments, make us your general Eastern sales agents. Will give your business special attention.

Mr. W. C. Michael, our Northwestern representative, is well known to a large number of the shippers of that section, and will be glad to call and see you during the season.

We own our own cold storage plant, the only one on South Water Street. It is an up-to-date one with a capacity for one hundred thousand boxes of apples. This, in connection with our store, places us in the best position of any one in the fruit business to protect the interests of the shippers.

We refer you to The First National Bank, Chicago, The Chicago Packer and the Produce Reporter Company

Salem Tile Factory**GOLD MEDAL**

Highest award on Tile at Lewis and Clark Fair

Tile From 3 to 12 InchOrder carload lots or for further particulars
write for booklet or call on or address**J. E. MURPHY**

Fairgrounds Post Office, Oregon

A Trip to the CoastIs incomplete without a ride
on the**Mt. Hood Railroad**By Mountain Streams, Apple Orchards
Virgin Forests and Snow
Capped PeaksConnects with O. R. & N.
at Hood River, Oregon**BUSINESS ANNOUNCEMENTS****F. NEWHALL & SONS
ANNOUNCEMENT**

Chicago, May 5, 1909.

Owing to the press of outside business matters of both members of our firm and the advanced age of the senior member, we have decided to discontinue our fruit business, and as a first step in that direction have agreed to sell to the Gibson Fruit Company of Chicago all our interest in the leases, cold storage plant and good will of said business, the transfer to take effect and possession to be given on Monday, May 10, 1909.

We retain accounts payable and receivable and all books and correspondence and papers connected therewith, also merchandise on hand and en route.

The deal has been a liberal one on both sides, with both parties satisfied. We therefore earnestly bespeak for the new company the same support and the same cordial relations with our shippers and customers which the old one has enjoyed. We believe that under Mr. Gibson the business will be increased, will run on broad lines, and be successful, and we will heartily appreciate everything which may be done by our old shippers to make it so.

F. Newhall & Sons,

By Benjamin Newhall.

**GIBSON FRUIT COMPANY
ANNOUNCEMENT**

Chicago, May 5, 1909.

We take a great deal of pride in announcing to the trade that we have purchased the wholesale fruit and commission business of F. Newhall & Sons, at 181 South Water Street, together with their cold storage plant, leases and good will.

Our first experience on South Water Street was with this firm twenty-two years ago, and having been associated with them altogether nearly twelve years, we of course feel very highly gratified to succeed an old established firm, and especially one with so long and honorable a career and such a high standing with the trade as F. Newhall & Sons.

As they are retiring from business, we, as their successors, will endeavor to continue it on the same high order they conducted it. We earnestly solicit the support of the old friends of F. Newhall & Sons, together with our own and the trade in general in our new venture.

We shall strive to conduct our new business in such a way as to be a credit to the fruit and produce trade, and hope our efforts will receive the encouragement and approval of all in the trade.

Gibson Fruit Company,

By N. G. Gibson.

BLACK LEAF Extract

Tobacco KILLS

APHIS**BALFOUR, GUTHRIE
& CO. Western Agents
PORTLAND, OREGON**Portland, Oregon, November 12, 1908.
E. H. Shepard, Esq., Editor "Better Fruit," Hood River, Oregon.

My Dear Sir: The November number of "Better Fruit" is such a good one and so handsome I had to make a notice of it. "Better Fruit" is the magazine de luxe of the Pacific Coast. Continued success to you. Sincerely yours,

W. J. Cuddy,
Editor Weekly Oregonian.Portland, Oregon, January 5, 1909.
Better Fruit Publishing Company:

Dear Sirs—Herein find enclosed check for "Better Fruit" for one year. This is a publication of which you may justly feel proud. It is not only a credit to its editor, but Hood River and the whole State of Oregon as well. I heartily congratulate you upon such a magnificent production. Yours truly,

B. N. Hamm,
7 Queens Road, Southport, England,Omaha, Nebraska, January 13, 1909.
Better Fruit Publishing Company:

Dear Sirs—I want to congratulate you on your beautiful January number, as it certainly reflects much credit on you. Yours truly,

Clayton C. Rhoads.

**ROBERT T. COCHRAN & CO.
COMMISSION MERCHANTS**

290 WASHINGTON STREET

NEW YORK

Want Apples

CORRESPONDENCE SOLICITED

• Members International Apple Growers Association

References: D. V. Burrell, Rocky Ford, Colorado; Ozark Improvement Co., Branson, Missouri; Oakland Fruit Co., Van Buren, Arkansas; Georgia Fruit Exchange, Atlanta, Georgia; Aetna National Bank of New York; Commercial Agencies

Rae & Hatfield**Largest Handlers of Pacific Coast Fruits in the East**REPRESENTING THE FOREMOST WESTERN SHIPPING COMPANIES AND ASSOCIATIONS
ON THE NEW YORK MARKET*Operating in All Producing Sections***Reliable****Experienced****Prompt**

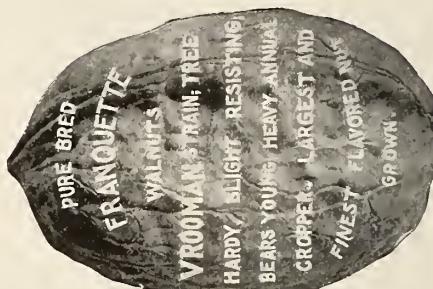
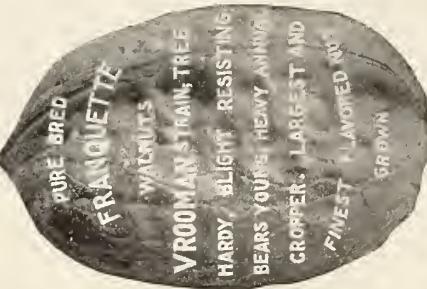
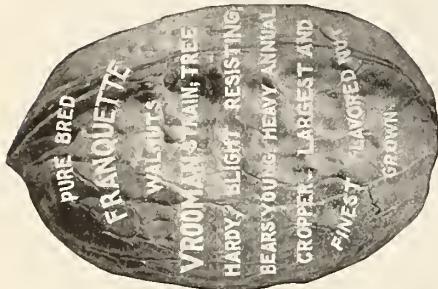
317 Washington Street

New York, New York

WHAT DOES V.P.B.F. STAND FOR?

IT REFERS TO THE
VROOMAN PURE BRED FRANQUETTE WALNUT

The Variety that is Being Planted more Extensively than any Other Variety of English Walnuts

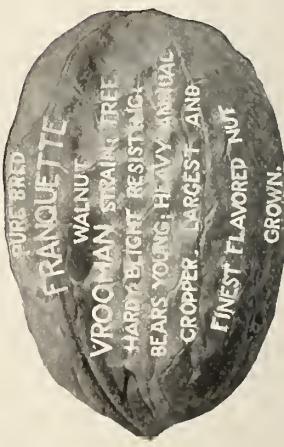
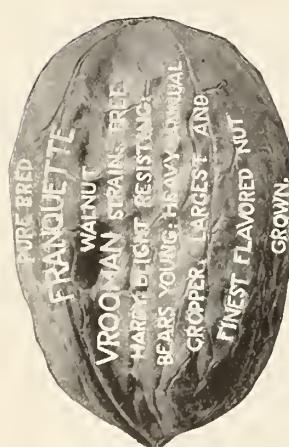
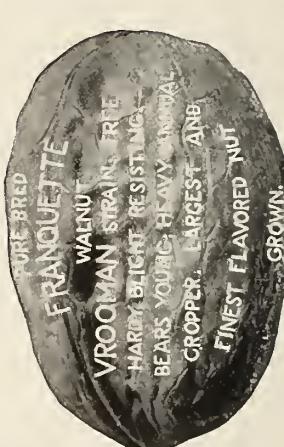


Those who are interested in English Walnut Culture, and who have investigated the merits of different varieties, invariably select the

VROOMAN PURE BRED FRANQUETTE

for the following reasons :

1. It is adapted to this Northern Climate.
2. It is a heavy and regular bearer.
3. It is a late bloomer, thus escaping early spring frosts.
4. The V. P. B. Franquette Walnut is of large size and well filled.
5. It has an exceedingly rich, oily, nutty, flavor.
6. The shell is of medium thickness, can be cracked with thumb and forefinger.
7. Trees are guaranteed "true to name."
8. All our scions for grafting purposes and all nuts for planting purposes come from specially selected GRAFTED TREES, thus guaranteeing uniformity of type.
9. And many other reasons which space will not permit us to enumerate, but which we'll be glad to explain fully upon request.



Our booklet on Walnut Culture explains all about the Vrooman Pure Bred Franquette and it will be sent *free* upon request. You should have it if interested in Walnuts.

In the way of APPLES, PEARS, CHERRIES, Etc., we have one of the largest stocks in the West from which to fill your orders.

Remember Our Trees are Non-Irrigated

With our new and enlarged packing sheds and improved up-to-date methods, our facilities for handling your business this year, are more complete than ever. Our constant aim is

To grow the MOST and BEST trees
And sell to the MOST and BEST people

Oregon Nursery Company

Successful Salesman Wanted

Salem, Oregon



"THE OLD RELIABLE"

Albany Nurseries

INCORPORATED

ALBANY, OREGON

LARGE STOCK, FIRST CLASS TREES

Place Your Orders Now

Catalogue Free

MORE SALESMEN WANTED

GOOD TREES

The planter who sets in his orchard other trees than the best he can buy—is making a serious mistake.

A good tree at a fair price is cheaper than a poor tree or one of questionable worth as a gift.

Orchard land is too valuable to be encumbered with trees that will be a long time in bringing returns.

Our trees are grown on the Yakima Reservation, isolated from old orchards, being as a consequence, free from pest or disease, and, possessing a splendid root system, they make a rapid growth and come into early bearing.

Agents everywhere

More wanted

Washington Nursery Company
TOPPENISH, WASHINGTON

Buy and Try

WHITE RIVER FLOUR

MAKES

WHITER, LIGHTER BREAD

RUSTY NAILS KILL PEST

THAT three rusty nails, driven at the base of an apple tree infested with the parasitic insects called "borers," will effectually stop the ravages of the pest that has successfully frustrated efforts of government scientists and horticulturists throughout the country, is the statement of E. J. Chipman, of 101 Main street, Joplin, Missouri, who has had experience as an apple grower in the orchards of southwest Missouri.

"It has been some time since I was actively engaged in the business," said Mr. Chipman, "but I had the remedy called to my attention during a recent trip through the apple growing part of Missouri, between here and Memphis. Acre after acre was plainly being destroyed by the pest, as I could see from the falling leaves that should not drop for a number of weeks. The 'borer' is the greatest enemy of the famous Missouri red apple, and with the exception of the remedy which I have found infallible, there is no means by which to stop their ravages.

"The nail cure is so simple and so hard of explanation in its effects, that many people will not even give it trial. But I used for years and always found it to work like a charm. Just take three rusty nails, wrought iron nails preferably, and drive them in the base of the trunk, about a foot from the ground and several inches apart. I do not know whether the polished round steel nails will give the same results. I always used old cut nails. A trial will prove the remedy is successful."—Colorado Fruit Grower.

HOW TO PACK PEACHES

North Fork Fruit Growers' Association, Paonia, Colo.

Pack only the extra large peaches, 3—2. Wrap papers tight, place stem end of fruit down, and make a firm, full package. Great care and accuracy are required in marking grade and grower's name.

Extra: 3—2 pack, rows 5—6 make 55; rows 6—6 make 60; 3—3 pack, rows 5—6 make 66; rows 6—6 make 72; rows 6—7 make 78; rows 7—7 make 84; 4—3 pack, rows 6—6 make 84.

Fancy: 3—3 pack, rows 7—8 make 90; rows 8—8 make 96; 4—3 pack, rows 6—7 make 91.

Choice: 4—3 pack, rows 7—7 make 98; rows 7—8 make 105; rows 8—8 make 112; 3—3 pack, rows 8—9 make 102.

In packing Choice, when fruit does not some up high enough in boxes, pack 4—4.

F. K. Spalding, Pres. W. S. McClain, Sec.
Harry K. Spalding, Vice Pres.

The Sunnyside Nursery Company

Paid up Capital \$26,000.00

The Sunnyside Nursery Company have sold practically all of their stock for spring delivery of 1909, and call your attention to the great stock they are growing for next year's trade. They will have

1,000,000 Apple Trees
200,000 Pear Trees
150,000 Peach Trees
100,000 Cherry Trees
50,000 Miscellaneous Varieties

Most complete stock in the Northwest. Write for prices

Main Office at Sunnyside, Washington
Branch Nursery at Grandview

Yakima Valley Nursery

Incorporated \$60,000 Fully Paid

LARGEST STOCK OF FRUIT TREES

in the Pacific Northwest.
Special prices for large planters. Salesmen Wanted Everywhere

W. D. INGALLS, President and Manager
NORTH YAKIMA, WASHINGTON

NUTS and FRUITS and FLOWERS

Are you seeking some especially rare plants or beautiful flower? If so write to us about it. Our stock includes almost everything in hardy plants and trees for garden and orchard. Rare Japanese Plants a specialty.

Okanogan Nurseries
OMAK, WASHINGTON

Hood River Nurseries

Have for the coming season a very complete line of

NURSERY STOCK

Newtown & Spitzemberg propagated from selected bearing trees. Make no mistake but start your orchard right. Plant generation trees. Hood River (Clark Seedling) strawberry plants in quantities to suit.

SEND FOR PRICES

Rawson & Stanton, Hood River, Oregon

True-to-Name Nursery OFFERS TO PLANTERS

Desiring strictly first-class one-year-old trees grown on No. 1 whole roots a few thousand apple, pear and cherry of the leading varieties adapted to the Pacific Northwest. We make a specialty of growing Yellow Newtown and Spitzenberg and personally select all buds and scions from bearing and tested trees. Order now for fall 1909; get trees guaranteed "true to name," and avoid future disappointment. Address

H. S. GALLIGAN

Phone Home 2002K Hood River, Oregon
Catalogue on Application

420 Acres Devoted to Nursery Purposes

THE WOODBURN NURSERIES

Established 1863 by J. H. Settlemier

Grower of Choice
Nursery Stock

F. W. SETTLEMIER
WOODBURN, OREGON

A REPUTATION TO SUSTAIN

VINELAND NURSERIES COMPANY

PROPAGATORS OF

Reliable Nursery Stock

ALL STOCK BUDED FROM BEARING TREES
FRUIT AND ORNAMENTAL

CLARKSTON, WASHINGTON

THE DALLES NURSERIES

(Successors to R. H. Weber)

GROWERS OF

Choice Fruit and Ornamental
Trees, Grape Vines, Small
Fruit Plants and Shrubbery

We do not employ Agents, but sell
DIRECT to the Planter, making
Commercial Orchards a specialty

All correspondence should be addressed to

THE DALLES NURSERIES
122½ Grand Avenue
PORTLAND, OREGON

REMEMBER—OUR TREES ARE GROWN
STRICTLY WITHOUT IRRIGATION

MISCELLANEOUS LETTERS AND COMMUNICATIONS

NORTHERN PACIFIC RAILWAY COMPANY
General Passenger Department
Portland, Oregon, March 1, 1909.
Mr. E. H. Shepard, Publisher "Better Fruit,"
Hood River, Oregon.

My Dear Mr. Shepard: I beg to hand you for your information letter of 25 ult. from Mr. Cleland with copy of circular used in the distribution of the fifty copies of "Better Fruit" furnished us by you each month. From the attached you will see how thoroughly they are distributed to the benefit of yourself and this company and the common cause. Yours truly,

A. D. Charlton,
Assistant General Passenger Agent.

St. Paul, Minnesota, February 25, 1909.
Mr. A. D. Charlton, A. G. P. A., Portland, Oregon.

Dear Sir: Please note the enclosed manuscript circular, and advise the publisher that we have taken pleasure in distributing the fifty copies received among our representatives in manner indicated, for their information and our mutual benefit in connection with the development of emigration to the Northwest. Yours truly,

A. M. Cleland,
General Passenger Agent.

Northern Pacific Railway
General Passenger Department (Advertising)
Circular A-13, 1909

St. Paul, February 19, 1909.
General and District Passenger Agents in the East.

With this I am sending you a copy of publication entitled "Better Fruit" (February issue), which contains some very interesting pictures and descriptive matter about the National Apple Show, and the points which the event brought out with prominence. This publication is well worth your perusal and is sent you for that purpose.

A. M. Cleland,
General Passenger Agent.



Dayton, Ohio, February 2, 1909.
Better Fruit Publishing Company.

Dear Sirs: I have been requested to read a paper on "Fruit Growing in Oregon" before the meeting of the Montgomery County Horticultural Association in May. I want all the light on the subject I can get. I was brought up in that region, and remember the first apple I ever saw. It was a big red one from the Willamette Valley, and was packed over the mountains on a mule's back in the year 1855, and was sold in the Rogue River Valley for one dollar. With that recollection it does not seem high at all to get Oregon apples here for a nickel apiece. The interest of horticulturists here is aroused on the subject, and as the business of fruit culture has improved somewhat since I left the state in 1874 I need to get late information. Can I get back numbers of your magazine? May I depend on you to guide me and help me? It may be that I can help Oregon, the state of my pride, in some small way. Yours,

S. O. Royal.



THE OPTIMIST CLUB OF AMERICA
10 West Thirty-third Street
New York, May 13, 1909.

Mr. E. H. Shepard, Hood River, Oregon.

My Dear Mr. Shepard: Your letter of April 15 was answered by my secretary, as it is almost impossible for me to attend to even a very small part of the enormous mail which comes to the office, but I was so impressed with your magazine, "Better Fruit," that I desire to say that it is one of the most beautiful, one of the cleanest, and one of the best horticultural journals, if not the best, that I have ever seen in my life. In fact, I thought so much of it that I sent it to one of the principal horticulturists in England, who does not believe that our Western people are more than a third civilized yet. I think it will open his eyes. Its advertising columns are particularly clean, and the executive committee of the Optimist Club have nominated it their official horticultural organ in the United States. We will send you from time to time all the good things which the Optimist Club gets out, and will be very glad indeed to be put on your lists, or we will send our subscription to "Better Fruit" if you prefer.

With very kindest regards and best wishes, I am, yours sincerely, William J. Robinson,
Optimist-at-Large.



THE NATIONAL FRUIT AND BERRY BOX
COMPANY
Manufacturers of
Sanitary Paraffined Paper Fruit and Berry Boxes

Toledo, Ohio.

Better Fruit Publishing Company.
Dear Sirs—Our box has much merit, being very easily put together, absolutely water and juice proof, and with absolutely no loss in putting together.

The growers at Council Bluffs were very much pleased with it, and I came home with an order for one-half million boxes. We are going to push this box very thoroughly, and will appreciate any co-operation on your part. We want you to feel that you will have no hesitancy whatever in recommending same to your friends and acquaintances.

Yours very truly,
The National Fruit and Berry Box Company.
Per C. O. Miniger, Secretary.

Burpee's Seeds that Grow

140 VARIETIES ANY QUANTITY

Plenty of Stock in our 40,000 Pounds

Growing Plants as Season Requires
All Makes High Grade
Pruning Tools
Garden Tools
Hose and Spray Nozzles
International Stock and
Poultry Food
International Remedies
Incubators and Brooders
Everything for Building
Everything for Furnishing

Stewart Hardware & Furniture Co.
22,000 feet floor space HOOD RIVER, OREGON

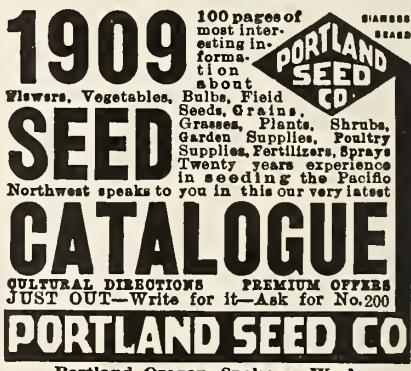
Quaker Nurseries

We have a large stock of Yellow Newtown Pippins, Spitzenergs, Jonathans, Wageners, Rome Beauties, and all of the leading varieties of apples.

We also carry a heavy line of Bartlett, Comice and Buerre d'Anjou Pears.

A general stock of peaches, such as Early Crawfords, Elbertas, Late Crawfords, Fosters, Early Columbia, Muir, Phillips, Tuscan Clings, etc.

Small fruits in great abundance, Raspberries, Blackberries, Strawberries, Dewberries, Gooseberries, Currants, Grapes. C. F. LANSING Salem, Oregon



FRUIT TREES

ALL STANDARD
COMMERCIAL VARIETIES

The best that good
care can produce

Write us now concerning your
Fall and Winter Planting
AGENTS WANTED

The Silva-Bergtholdt Company
121 Orchard Street Newcastle, California

THE APPLE—A NATIONAL FRUIT—ITS BY-PRODUCTS

"An apple a day will drive sickness away."

How often have you heard this statement made? The writer has no means of knowing whether the above is literally true, but it is a known fact that the apple contains food elements of the highest nutrient value and in a form most easily digested and assimilated by the human body. It contains elements absolutely essential to the proper and healthful functions of the various human organs.

In the last few years there has been in progress a great campaign of education among the apple growers of the United States, and one of the results of this movement was the exposition which was recently held at Spokane, Washington; a show which consisted wholly of apples and in which premiums representing thirty-five thousand dollars were awarded to the growers of the best commercial apples. The primary purpose of this exposition was to demonstrate the value of the apple as a wholesome food and to show its manifold uses and the uses of its by-products.

The apple growing industry is a substantial one; few enterprises offer surer or more attractive profits. There will never be an overproduction of first-class stock of either apples, cider, cider jelly or cider vinegar. Indeed, it is impossible to produce the enormous quantity needed to meet the

BETTER FRUIT

demand. It is said that today not one-tenth enough cider is produced to supply the demand for pure cider vinegar, and chemical vinegars are foisted on the public in its stead.

With the improvements in modern machinery, cider and cider vinegar cost less to produce than ever before, yet on account of the public demand for only first-class apples, many hundreds of thousands bushels of apples are allowed to go to waste each year that might readily and easily be turned into cider for cider vinegar.

The Hydraulic Press Manufacturing Company, of Mount Gilead, Ohio, who are the pioneers in the manufacture of hydraulic cider presses and cider and vinegar-makers' supplies, have kept in touch with all of the modern discoveries regarding the production of refined and clarified cider and cider vinegar and have from time to time issued literature bearing on the subject.

They have recently issued the second edition of two 50-page bulletins treating of plans and processes for manufacturing cider vinegar, cider jelly, etc. This company have recently established an analytical laboratory at the home office, in charge of an experienced chemist and horticulturist, Mr. H. J. Alwood, son of Professor William B. Alwood, entomological chemist of the United States Bureau of Chemistry, for the purpose of analyzing ciders and vinegars and to advise their patrons how to produce high grade apple products, and how to plant, cultivate, prune and spray apple and peach orchards.

They teach their patrons how to convert the juice of the apple into wholesome, palatable and legitimate products for culinary and table purposes.

◆ ◆ ◆

Macon, Missouri, December 15, 1908.

Better Fruit Publishing Company:

Dear Sirs—A copy of your fruit paper having been sent us by a friend residing in Spokane, Washington, we enclose you one dollar and beg that you place us on your list for 1909. Without

disparaging any of our local journals of this kind, we wish to say that yours is the best thing of the kind ever getting upon our desk, and we wish to see more of it. Yours truly,

Wardell-McCully Orchard Company.

◆ ◆ ◆

Hode Farm, Patrixbourne, Canterbury, England, December 31, 1908.

Better Fruit Publishing Company:

Dear Sirs—We shall be glad if you will forward as soon as possible a sample copy of your paper called "Better Fruit," also price of same. Yours faithfully,

George Mount & Sons.

◆ ◆ ◆

Oregon City, Oregon, December 23, 1908.

Better Fruit Publishing Company:

Gentlemen—Enclosed please find One Dollar for one year's subscription to "Better Fruit." Wishing you the compliments of the season and a better year for "Better Fruit," the only orchard man's paper, yours respectfully, S. R. Cogan.

◆ ◆ ◆

New York, N. Y., December 19, 1908.

Better Fruit Publishing Company:

Gentlemen—A copy of current month's issue was sent me by a friend in Spokane, which had so many good things for fruit growers in, that I find I need the magazine in my business of trying to grow better fruit in a prejudiced community. It contains valuable ideas. Yours truly,

J. E. Wolf.

◆ ◆ ◆

Payette, Idaho, January 18, 1909.

Better Fruit Publishing Company:

Gentlemen—Please find check for One Dollar, for one year's subscription to "Better Fruit." I like your paper and could not think of trying to raise a crop of fruit without your valuable paper. Wishing you another successful year, I am, very truly yours,

R. F. Shaw.

FRUIT GROWERS, YOUR ATTENTION!

Royal Ann, Bing and Lambert cherry trees; Spitzenberg and Newtown apple trees; Bartlett, Anjou and Comice pears, and other varieties of fruit trees

A. HOLODAY

MONTE VISTA NURSERY
SCAPPOOSE, OREGON

Capital City Nursery Co.

Office on Twelfth Street, Salem, Oregon

FRUIT TREES, SHRUBBERY AND HIGH GRADE ORNAMENTALS

OUR MOTTO :

Has ever been, "Superior High Grade Nursery Stock :
Not the Cheapest in Price, but the best in quality."

This is why our stock is now bearing fruit in every State in the West including Western Canada. ¶ You are making no experiment when placing an order with us whether it be for a single shrub, a single tree or nursery stock in quantities. ¶ Our stock is complete and prices right. ¶ To anyone anticipating planting either fruit or ornamental shrubbery, we would say, if our salesmen fail to call on you, you should write direct to us for descriptive catalogue. If interested in walnut planting so state.

WE CAN AT ALL TIMES FURNISH TERRITORY TO THE UP-TO-DATE SALESMAN

Stanley-Smith Lumber Co.

WHOLESALE AND RETAIL

LUMBER

Lath, Shingles, Wood, Etc.

Hood River, Oregon

Oregon Box & Mfg. Co.

Portland, Oregon

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SPRUCE BOXES DRIER TRAYS

Write for price before placing your order

TEN REASONS YOU SHOULD READ THE PACIFIC MONTHLY

First—It is the leading magazine of Western America, published on the Pacific Coast, edited by Western men, and its entire contents are Western. With pen, brush and camera, it tells the story of the wonderful progress of the West.

Second—No other section of the entire world is experiencing such rapid industrial and commercial growth as that section of the United States west of the Rockies. It is a duty you owe to yourself to keep informed—The Pacific Monthly completely covers this field.

Third—There are opportunities for the extension of practically every line of business in this territory, and The Pacific Monthly tells of these opportunities.

Fourth—if you are looking for a chance to invest or locate—commerce, farming, orcharding or professional work, if you are worn, tired or in ill health, seeking rest and recreation, The Pacific Monthly will give you a thousand valuable hints.

Fifth—Here also you can get close to nature. The great snow-capped mountains, in all their rugged grandeur, the boundless plains and the virgin forests, "God's Country," untarnished by the hand of man. Do you not wish to spend a few hours each month with us?

Sixth—The best of Western literature is to be found in the Pacific Monthly, Live Topics of The Day, Stories of Progress and of Opportunity, the Romance of the Mountains and the Plains, always intensely human.

Seventh—One never tires of beautiful pictures and The Pacific Monthly is famous for its illustrations, always a veritable picture book of Western scenery, from Mexico to Alaska and from Denver to the Coast. No expense is spared

in securing the most striking photos for reproduction in colors and halftones.

Eighth—The Pacific Monthly should be in every home. From cover to cover it is clean, wholesome reading of an educational nature. It is particularly interesting and valuable both to teachers and students.

Ninth—Look upon your map, note the great area west of the Rockies, think of the wonderful resources of this section of your country—thousands of acres of agricultural lands, billions of feet of standing timber, mineral riches beyond comprehension, extending to the shores of the mighty Pacific, the highway to the Orient—Do you not want to know more about this marvelous country?

Tenth—A spirit of optimism prevails throughout the West that lends life and vigor to all. That is why The Pacific Monthly is different. It comes to you each month breathing this spirit of the West. It will put red blood in your veins—try it.

Pacific Monthly.....	\$1.75
Better Fruit.....	1.00
	\$2.75
Both for.....	1.75



FRUIT BOXES

WE ARE EXTENSIVE MANUFACTURERS OF

Five Pound Tin Top Baskets
Common Quart Hallocks
Plant Bands
Shipping Crates
Apple, Pear, Peach and Picking
BOXES

OREGON AGENTS FOR THE

Hoquiam Patent Folding
Berry Hallocks

WE SOLICIT YOUR INQUIRIES

Multnomah Lumber & Box Co.
Foot Bancroft Avenue Portland, Oregon

PINE BOXES

BRIGHT, LIGHT FRUIT BOXES FROM
THE FAMOUS KLICKITAT PINE

Our new plant can fill your orders promptly
and satisfactorily and save you money.
Send your specifications and ask for prices

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GOLDDALE, WASH.

The Hood River Electric Light, Power & Water Co.

DOING A GENERAL ELECTRIC
LIGHT AND POWER BUSINESS

TWENTY-FOUR HOUR SERVICE

City Water Works System for Domestic and Municipal Use.
Are prepared to furnish 3000 Horse Power, either
Electric or Water, at Reasonable Rates

General Office, HOOD RIVER, OREGON

THE UNIVERSITY CLUB OF HOOD RIVER

Just recently there was a distinguished man visiting in Hood River and taking in the sights of the valley. He had the glories of Mount Hood and Mount Adams pointed out to him; the grandeur of the foothills delighted him, for their high lumpy sides seemed to indicate, like the Valley prosperity, that they had come to stay, and all around there were sights which pleased him mightily. Everything which met his eye seemed substantial and the people seemed to be enjoying life. Question upon question, he asked, concerning the method of growing apples and strawberries, the prices the fruit brought and the cost of production, land prices and soils. He was told of the different water systems for irrigation and the institutions of Hood River; the churches, schools and associations. He remarked that the place seemed too small to have so many successful interests. As he was about to leave he remarked to his friend who was showing him around:

"Well Jim, what else have you got around here that I haven't seen yet?"

"Nothing, I guess," was the reply; "except maybe the University Club."

"What are you talking about?" was the astonished reply of the visitor. "You don't mean to

say that as small a place as Hood River has an organization of this kind, do you?"

Well, he was told that this was the case, astonishing though it might seem. He was told that there were over one hundred college men in the Valley, and nearly all of them interested in raising fruit and that one hundred were members of the club. Other and more interesting things were told of the activities of the members and he was shown the small, though well-furnished home of the club.

"Now, I'll be blown, I'll be blown," this visitor continued to remark. Then he said that "he'd be —," and here he mentioned a stronger and more comprehensive word than "blown."

"I'll have to stay over the next train," continued this visiting Easterner, "and look up some of these farmer college men. I'm a graduate of Yale and my two sons have been out of college for a year now and don't want to do inside work. They have some money and if this fruit business looks all right on investigating, and these club members look the right sort and not too everlastingly congenial, why I don't think they could do better than come West and get a start in a new community where they would have



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stop at the

MT. HOOD HOTEL

Trains stop directly in front of
Hotel. Bus meets all boats

Automobile Service Daily for
Cloud Cap Inn During Months
of July, August and September

When you come to Portland go to

The Cornelius

Corner Park and Alder Streets, Portland's newest and most up-to-date hotel. It is sometimes difficult to make a change in hotels. However, give "THE CORNELIUS" a trial on your next visit to Portland and be happy. European plan.

Rates reasonable.

DR. C. W. CORNELIUS, Proprietor

St. Helens Hall

Portland, Oregon

A GIRLS' SCHOOL OF THE HIGHEST CLASS

CORPS OF TEACHERS, LOCATION,
BUILDING, EQUIPMENT THE BEST

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Plan Your Vacation Now at Our Expense

A CHOICE OF FOUR

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Seattle, during Alaska-Yukon Exposition
Yellowstone National Park
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ALL YOUR EXPENSES PAID

If you have friends in the East who want to visit the Pacific Coast we can arrange it

THIS IS YOUR OPPORTUNITY

For Complete Information Address

SUNSET TRAVEL CLUB

ROOM 16, FLOOD BUILDING
SAN FRANCISCO

The KURTZ Fruit Dryer

Simplest, cheapest and best dryer in use in Oregon, Washington and California. Tunnel system, best system on earth. We build by contract or furnish plans and patent rights and material, wire cloth, cast iron furnaces and furnace pipes. We also manufacture the Kurtz Prune Dipping and Spreading Machine. It has no equal; saves its cost in less than one season; capacity 200 to 250 trays per hour. Write for descriptive circulars and prices.

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SALEM, OREGON

SLOCOM'S BOOK STORE Office Supplies Stationery

Ledgers, Journals, Time Books
Memorandum Books
Rubber Stamps
Souvenir Postals *Picture Frames*

BETTER FRUIT

friends from the start and no chance to get homesick or lonely. I'll look these chaps up. Maybe there are a few from Yale."

He found two or three from Yale and missed as many trains but went away, impressed more than ever with the worth of the community as a place to start business in, for his sons at least.

Many of the club members are residents of Hood River and are professional or business men of that thriving place, and orchard owners. But the majority of the membership is composed of young men who have but recently come from the East to take up the business of raising fruit in Hood River Valley. These men would frequently meet in Hood River while in on business and after a time it began to occur to some that a University organization would be more agreeable and that it would be a means for bringing more of them together and establishing acquaintance among the new-comers, as making friends was somewhat slow where everyone was so busy. From the talk of a simple organization of this kind there grew sentiment that there should be some headquarters and home for the club where members could arrange for appointments or write letters, or otherwise spend the time, while in Hood River, and not being absolutely engaged in some business. Thus it came that with the organization came the plan of getting a home.

And so in August, 1908, the preliminary organization was completed. The meeting was held in rooms of the Hood River Commercial Club.

It would be difficult to exactly state where the first home of the club in Hood River was located.

This applies more to the men who live outside the Apple Village as those who live in that hamlet, fortunately, have their own homes. But most of the outside members are unmarried and in town they stay at the hotels or just go around until it is time to leave back to their ranches. Probably the first home was in Ned Shepard's office, the editor of Better Fruit. The rancher-collegians would stamp in these rooms for a few

**The
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*Hood River's Largest and Best
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American Boy	2.00 "	1.65
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Better Fruit, \$1.00

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BETTER FRUIT

AND	Value	Cost
National Home Journal.....	\$1.50 for	\$1.25
National Magazine	2.50 "	2.00
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Outlook	4.00 "	3.75
Pacific Monthly	2.50 "	2.00
Pearson's Magazine	2.50 "	2.00
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Smith's Magazine	2.50 "	2.20
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We have in this valley an agricultural paradise.

We have hundreds of prospering ranches.

We have the oldest orchards in the state.

We have the noted Blalock fruit farm of 1,500 acres.

We have the famous Dumas orchard of 100 acres, that has produced 69,000 boxes of high grade apples during the past two seasons.

We have the earliest strawberries in the state, year after year.

We have a climate that is right, and gardens grow nearly all winter.

We have the soil, and the water in abundance, and our valley has been making good, as a place to farm and a place to live, for the past fifty years—yes, we emphasize that latter point, for it is of more importance than is sometimes understood. **WALLA WALLA VALLEY IS A GOOD PLACE TO LIVE**, for here agriculture goes hand in hand with a long established "civilization." In fact, the chief city of the valley, in addition to offering every ordinary convenience and benefit, is the home of the famous Whitman College, now accumulating an endowment of \$3,000,000, and ready today, with the scores of other schools throughout the valley, to welcome your children to opportunities equal to those of the East.

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minutes, spread as much volcanic ash clay, or red shot soil from their muddy boots, as they could conveniently spare, and while away a few moments while Bragg & Co., or some other firm, put up the groceries. But the genial President never minded the boot tracks and there was always a hearty welcome and a powerful cigar for the fellow member. But the present home is in the Hall building where the three rooms will compare favorably with any similar lounging rooms in the country today.

One of the green spots in the existence of the club was the first annual banquet held October 17, 1908. Members blew in for this event from The Dalles, Portland, Mosier, Underwood, White Salmon, Upper Valley, Odell, the East Side and West Side of the Valley. They were all there, and with vim. Toastmaster E. L. Smith remarked in his opening speech, "that it was the first time he had acted as toastmaster for a band of Comanche Indians." This compliment was received by the entire company beating on the tables with whatever they could grasp in their hands and by emitting strong "huzzes" from their lips. The echoes of this demonstration carried three miles across the Columbia River. Other similar outbursts occurred and many patient guests in the Mt. Hood Hotel that night regretted that the

club had been organized, or that they had not put off for a day, their visit to the city. But there were no regrets on the part of the diners and Toastmaster Smith finally got his warriors off the warpath and safely stowed away in their peigwams.

The present membership of the club (May 26, 1909) is one hundred and one, and they hail from all over the United States. They come from forty different alma maters. And among the list can be found men who have started out in life to become mining engineers, newspaper men, civil engineers, business men, ministers, bankers, lawyers, doctors and a variety of other professions, who have turned aside from the roller top desk and stuffy office heat, to the cool air of the out doors and the equally remunerative, and decidedly more healthful occupation, of raising apples and strawberries. The university and number from each follow:

Harvard, 3; Yale, 4; Cornell, 6; Michigan, 11; Princeton, 4; Williams, 3; Amherst, 1; West Point, 1; Dartmouth, 2; Brown, 1. The following state universities: California, 8; Wisconsin, 3; Illinois, 3; Oregon, 8; Washington, 1; Missouri, 3; Minnesota, 3; Iowa, 5; Ohio, 3; Indiana, 2; Pennsylvania, 1. Oregon Agricultural College, 4; Drake University, 1; Massachusetts Institute of

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COLUMBIA TRUST COMPANY

Board of Trade Building

PORLAND, OREGON

Technology, 3; Oberlin, 1; Northwestern, 1; Lombard, 1; Lane, 1; Rush Medical College, 1; Barnes Medical, 1; Bellevue, 1; Clark, 1; Miami, 1; Lehigh University, 1; Otterbein, 1; Kenyon, 1; Cincinnati, 1; scattering, 7.

There is another event in the short Club history which members and friends alike take pleasure in the memory of. That is the first annual dancing party, held in February, 1909. At this time the members paid off many social obligations and gave themselves a great deal of pleasure. The ball-room in Hood River was crowded, there being fully as many spectators as dancers. Guests arrived from Portland, the Washington side, the Valley proper, the upper Valley, Mosier, The Dalles and Ilwesum, Washington. The hotels had reservations a week before this event and the night of the party there was no available accommodation. Good music, good people, pretty girls and women, together with the proper kind of refreshments made this evening, and a good part of the following morning, a gay time. All the young men present voted that raising apples was one of the best professions in the world. The banquet and ball are annual events of the club.

Of course the most interesting portion of the club to the young college man looking for a location, or for an old college man for that matter, is the younger membership of the club; the young men who have come out to Hood River and have been occupied in the business for the

first few years. It is interesting to observe how these young men take a life that is entirely different than their training. Most of them take it both humorously and seriously. There is the funny side and the serious side. Most of them are hard workers. A great many have realized that they have got to learn things from the bottom again; have to become "Freshmen" again, and plunge into the toils. They show nerve and determination even if at some times they do not show the mature judgment of the fruit men who

delved around in the volcanic ash during the balmy times when Hon. E. L. Smith was spraying for aphids, when Chris Dethman was exterminating the codlin moth, and when Ludwig Struck was putting on the fertilizer around his famous Yellow Newtown Pippins. But this judgement will come in time and there has already been seen enough of originality in the younger generation to show conclusively that there will be some surprises in the future.

But these young college men have brought their undergraduate enthusiasm along with them, and it is a powerful asset. Combining this with what they see from the old time residents, who are the best folk on earth for giving assistance and advice, they will do great things for the fruit industry and themselves. They will do good things for the valley and if the University Club will hold these men together, it, in a small way, will contribute its measure of success to the Hood River apple industry, as the older organizations have already done. Come and see us.

KELLY.

A. C. SHAW

ROY F. DEAN

Home Phone 3

HEADQUARTERS FOR CENTURY SPRAY PUMPS

Hose, Nozzles, First-class Plumbing Supplies

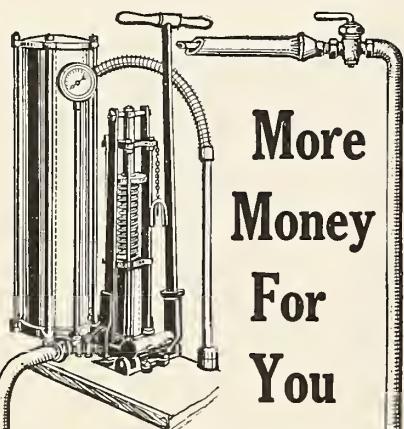
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Electric Wiring and Supply Co.

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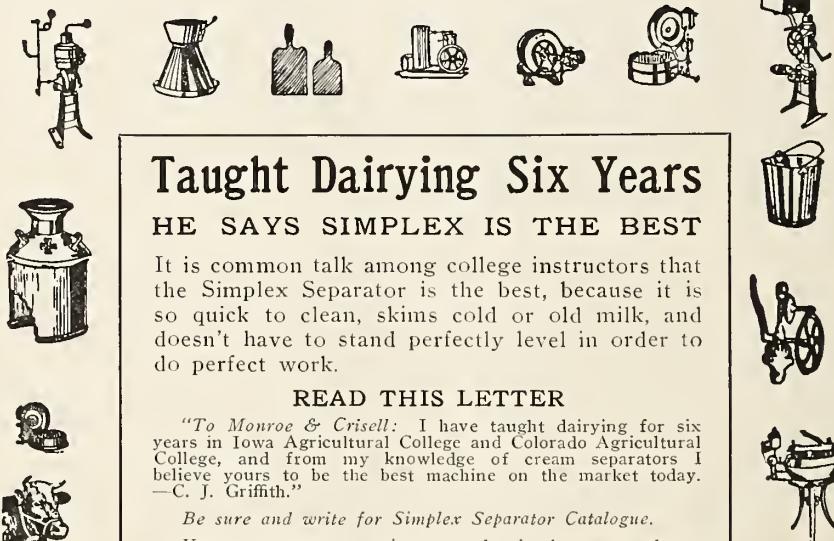
Greater productiveness of trees —larger, cleaner, and finer fruit —more money. Isn't that fruit growers' reasoning? Nothing will contribute to this end more than effective spraying. And Effective Spraying can best be attained with

Bean Magic Spray Pumps

Effective spraying means High Pressure Spraying and till the advent of the Bean Magics a high pressure could not be maintained with a hand pump for any length of time, on account of the body-racking effort needed to operate it. The Bean patent spring divides the work between the two strokes of the handle and works against only one-half the pressure shown on the gauge and saves exactly one-third the labor.

Our illustrated catalog No. 21 describes ten sizes of hand pumps, and contains much valuable spray information, and formulas. Catalog No. 22 describes Power Sprayers. Both books sent free. Write for our special offer, state number of acres and kind of fruit.

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It is common talk among college instructors that the Simplex Separator is the best, because it is so quick to clean, skims cold or old milk, and doesn't have to stand perfectly level in order to do perfect work.

READ THIS LETTER

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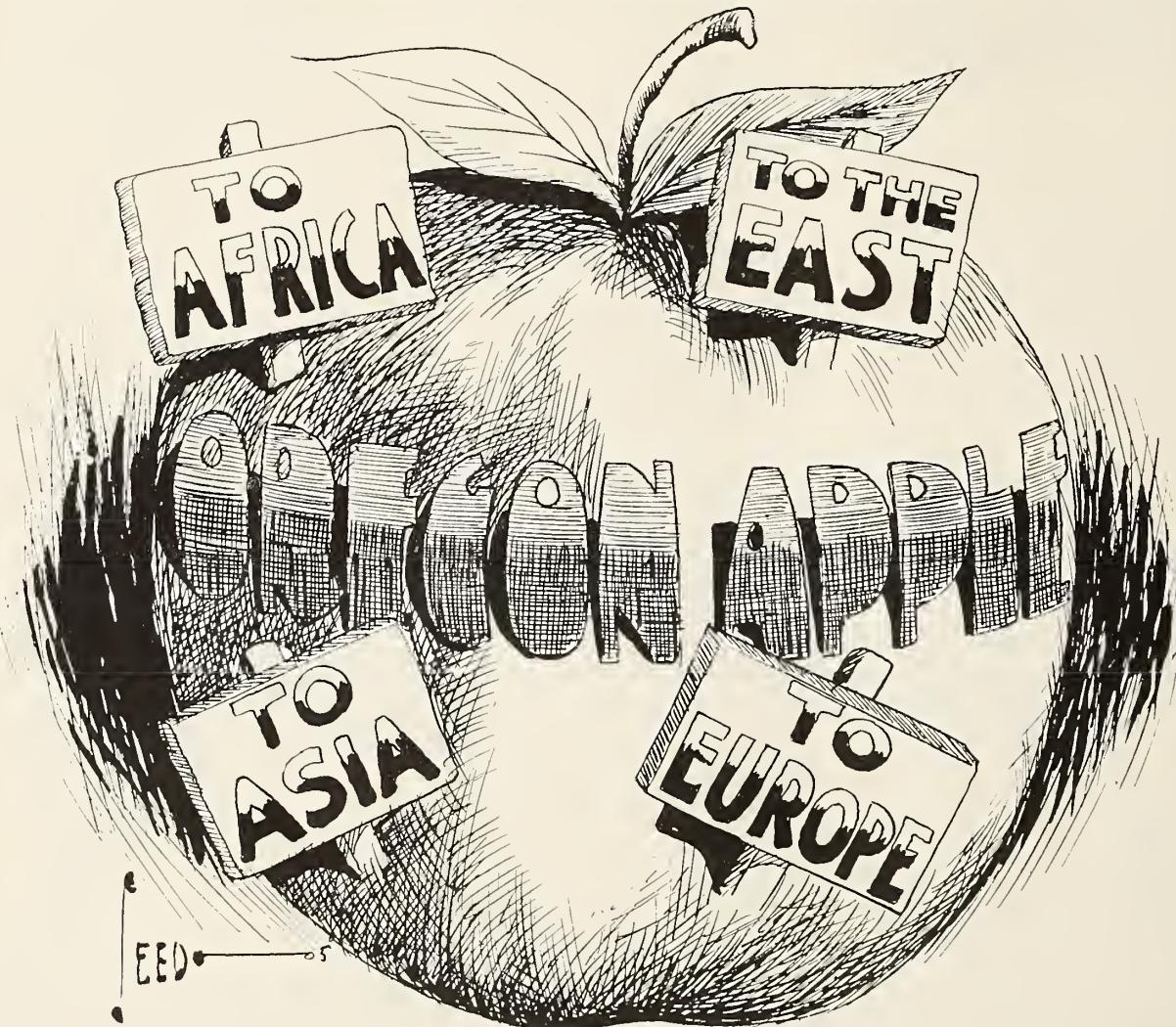
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Where fruit pays from \$500 to \$1800 per acre and is marketed for you at the highest prices paid anywhere in the world, while still on the tree. Forty thousand acres of finest apple land still undeveloped. One hundred thousand horsepower going to waste in its streams. Population, 6000; value fruit products, 1908, \$800,000; value lumber output, 1907, \$750,000; taxable property, \$2,700,000; bank deposits, 1901, \$36,000; 1908, \$900,000. Railroad and water transportation. Two hours from Portland, twelve hours from Seattle and Spokane. Rural and city mail delivery. Phone and electric light service covering city and valley. Let us tell you about it. *Do it now, to-day.* Address

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IT WILL NEVER BE CHEAPER

I can offer you the greatest bargain in
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Apples from
White
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One-half mile from Husum, six and one-half miles from Underwood. Nearly all cleared and ready to plant trees. Land gently rolling; soil same as Hood River. Abundance of spring and river water. On main county road, telephone line, etc. One mile from electric light plant. Can be irrigated. All land strictly first-class. Unsurpassed opportunity to develop big commercial orchard, or will subdivide. Address

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Apple Land

Good, Better, Best at Prices Lower than
Less Valuable Land in Other Localities



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Scenery, climate, water and general conditions unsurpassed for residence, and for the raising of all kind of fruit. Mosier is a Siamese twin to Hood River (6 miles east) in the fruit industry

Further Information Gladly Furnished by

Commercial Club of Mosier Valley
MOSIER, OREGON

SUMMER RATES EAST

DURING THE SEASON 1909
VIA THE

OREGON RAILROAD & NAVIGATION CO.

Oregon Short Line and Union Pacific Railroad

FROM

Portland, Seattle, Spokane, Tacoma, Walla
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To Denver and Return \$55

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These tickets present some very attractive
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A Quarter of a Mile of RED APPLES**This 20-acre Apple Orchard**

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\$21,000 Income in One Year**Yakima Valley
WASHINGTON****The Home of the Prize Red Apples**

It is up to you to get a home in this Wonderful Irrigated Valley. This is the Land of the Moneymakers.

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On the line of the

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Hood River holds the high price record for nine years on Spitzenerbergs and Newtowns.

Hood River apple pack is the only pack selling on the English market without the box being opened.

Hood River apples and pack are guaranteed. The seal of quality.

Hood River is the only fruit section in the world with a University Club. Over 100 members are fruit growers.

Hood River scenery is the grandest in the Northwest.

Hood River is healthy. Its water pure. Climate ideal.

Hood River people have health, wealth and happiness.

Hood River orchardists are clearing from \$300 to \$1,000 per acre.

Hood River Valley, its apples and people, are a class by themselves.

Hood River is just beginning to develop and set the upper valley to orchards. It is the best deep volcanic ash soil. I sold my place in the lower valley and bought in the upper valley because I could get more land for less money. I have 160 acres set to orchard not for sale. I have 160 acres ready to set. Price, \$250 per acre. I will subdivide in 10, 20 and 40-acre tracts. This land in the lower valley would sell for \$1,000 per acre. I have a few choice 10, 20 and 40-acre tracts, uncleared, at from \$50 to \$150 per acre. Write for further particulars, or call on

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DUFUR VALLEY
 OREGON

Dufur Valley lies on an average of twenty-five miles east of Mount Hood, in Wasco County, Oregon, and is unique in position and variety of resources because its territory is divided almost equally between open prairie and lightly timbered sections. Three streams having their sources in the eternal snowbeds of Mount Hood furnish water to the valley. As a home for the man of moderate means or as a safe investment this fertile valley offers opportunities never excelled and rarely equaled. The lightly timbered section is rapidly becoming known as one of the most promising fruit sections in the Northwest, and these lands are on sale at the remarkably low price of **\$10 to \$30 an acre!** The subdivisions into which the large wheat farms on the prairie are being divided are devoted to diversified farming, and all crops common to the temperate zone are grown successfully. This land sells at **\$15 to \$40 an acre**, and can usually be purchased on easy terms. Our transportation facilities are above the average. Dufur City, the metropolis of Dufur Valley, is the terminus of the Great Southern Railroad, which connects with the O. R. & N. and steamboats at The Dalles, only thirty miles distant, from where water rates are enjoyed to tide water. Write for descriptive booklet, which will tell you all about the Dufur Valley and the unusual opportunities offered.

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DUFUR, OREGON

Umpqua Valley Fruit Lands

Perhaps no other section of the Northwest offers greater opportunities to the homeseeker and investor than does the famous fruit belt of the Umpqua Valley.

Nature has bestowed her richest favors upon this favored region, and one may enjoy the delights of an Italian climate here and reap a golden harvest in the growing of fruit.

The climatic advantages relate not only to one's own comfort—because there are no extremes of heat or cold—but to production as well, for mildness of climate means earlier fruits, no frosts, full crops, and the rainfall is sufficient to mature all fruit, bringing it to the highest state of perfection without irrigation.

Irrigation being unnecessary in the Umpqua Valley means a saving of time, labor and money, better colored and finer flavored fruits which keep better and stand shipping better.

THE ROSEBURG HOME ORCHARD TRACTS

owned and being developed by the W. C. Harding Land Company, were the first to be offered in 5, 10 and 20 acres, and in 1908-9 an orchard of 1,200 acres is being planted by them for purchasers who wish them to plant and care for their orchards.

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Their plan of **intertree development** commends itself. This is the method of planting peach trees between the apple trees. This method is strongly advised, as peach trees begin to bear the third year and thus give quick returns. A peach crop failure is unknown in the Umpqua Valley, and can be marketed two weeks earlier than other parts of Oregon, thus commanding fancy prices.

We solicit full investigation and only ask the opportunity to show the homeseeker and investor our Umpqua Valley lands and prove every statement we make. Our prices are much lower than those in more widely advertised fruit districts and our terms are within the reach of every man who desires to provide for the future of himself and family. For booklet, prices and complete information call upon or write the

W. C. HARDING LAND COMPANY

Bank References Furnished Upon Request

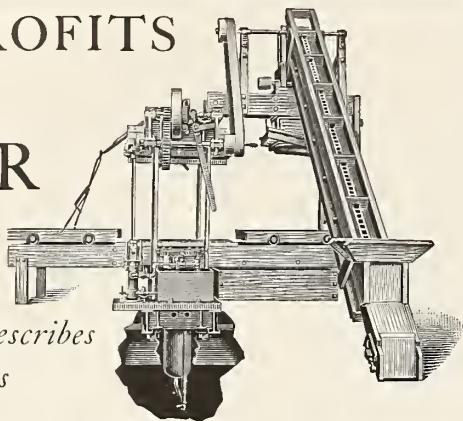
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Cider and Wine Presses**

Capacity, 10 to 400 barrels per day. Made in all sizes, hand or power

FULLY GUARANTEED

Write for any information desired. We can show you how \$1,500.00 clean profit can be made.

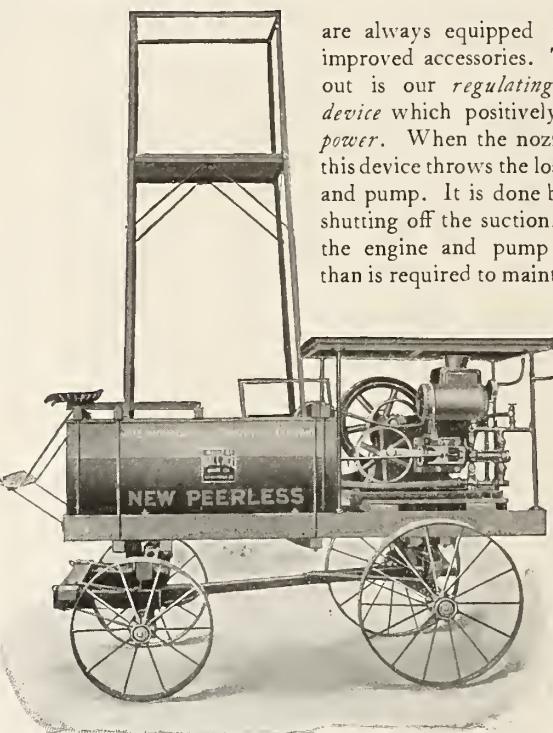
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Largest Manufacturers of Cider Presses in the World

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are always equipped with the most improved accessories. The latest thing out is our regulating and unloading device which positively saves half the power. When the nozzles are shut off this device throws the load off the engine and pump. It is done by automatically shutting off the suction. The load on the engine and pump is never more than is required to maintain the pressure on whatever number of nozzles are used. Consequently our machines work under the minimum load all the time, instead of under the maximum load as others do.

*New Peerless
Mounted*

Our NEW PEERLESS SPRAYER shown above was the wonder of the National Apple Show, Spokane. It maintained a constant pressure of 200 to 220 lbs. with less than half the usual power. Better get informed about this. The device is applicable to all kinds of sprayers

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SPOKANE, WASH. Manufacturers Wallace Sprayers CHAMPAIGN, ILLINOIS

See the "Quality" Engine in Machinery Hall A.-Y.-P. Exposition

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THE ALAMO is the best for you

The price is right

We have exhibited the Alamo engines at several of the local fairs. At the recent State Fair held in Salem we took with the Alamo engines all the prizes, which were as follows:

First prize on easiest starting engine.

First prize on best portable engine.

First prize on best deep well pumping outfit.

First prize on best centrifugal pumping outfit (irrigation).

First prize on best electric lighting outfit.

First prize on best gasoline engine exhibition.

These awards were only made after actual demonstration of the engines, and all other standard makes of engines were represented. The awards were all duplicated at Pendleton and Walla Walla.

The Alamo engine has been selected by the State University at Eugene, and also by the Oregon Agricultural College at Corvallis, as the best engine adapted to demonstrate the latest and most approved principles of gas engine practice to the students. Our 3-h.p. Alamo Vietor vertical electric lighting outfit was selected by the Southern Pacific Company to light the demonstration train which toured the Willamette Valley last fall under the direction of the Agricultural College, and these people were so well pleased with the Alamo engine that it was again selected by them to light the demonstration train which recently toured Southern Oregon. The Westinghouse Electric Company and the Northern Electric Company, which as you know are the two largest manufacturers of electrical goods in America, have both adopted the Alamo gasoline engine, and now recommend them and illustrate them in their bulletins. A complete stock of engines, together with a full line of extra parts, is always available. If you will inform us concerning the exact use for which you wish the engine, we will be pleased to furnish you gratis what information we can concerning the necessary horsepower. We have had a great deal of experience in making installations of all sizes, and no doubt can be of some assistance to you.

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Sizes Fruit accurately, rapidly and enables the practical Grower to put up the Commercial pack for the Fancy Trade. Live Agents wanted in every fruit district throughout the world.

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EASILY DETACHED
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The "New-Way" POWER SPRAYER
IS EQUIPPED WITH THE FAMOUS
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GASOLINE
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Fruits of High
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Carries high pressure without the usual vibration or strain, and is the most practical, durable and economical machine ever built for spraying. Use your own running gear if you prefer. Write us today for Spray Catalogue No. S-8



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Before you make your plans finally for your summer outing send for the new Summerbook just published by the O. R. & N. and S. P. and read all about the popular beach resorts of the Northwest.

North Beach

Is the popular summer resort on the Washington coast near the mouth of the Columbia River, reached from Portland, Oregon, daily, except Sunday, by the O. R. & N.'s fine excursion steamer T. J. POTTER. Send for a schedule.

A dozen little cottage settlements scattered for miles along the wooded meadowland just back from the beach furnish comfortable accommodations for thousands of pleasure seekers every summer. Climate delightful; no extreme heat; no dust; exhilarating surf bathing; all kinds of amusement; plenty to eat, cost moderate. An ideal place for rest and recreation. Summer excursion rates from all parts of the Northwest.

Newport

YAQUINA BAY

Is Oregon's noted beach resort. It is reached by way of the Southern Pacific to Albany, Oregon, thence Corvallis & Eastern Railroad to the coast.

The attractions at Newport are said to be so varied and numerous that they cannot be exhausted. Its agate beds on Nye Beach, rock oyster beds, Indian camps and basketmakers, boating and launching on Yaquina Bay, surf and bathhouse bathing, hunting, fishing, picnicking, etc., keep visitors busy all summer with pleasant and healthful pastimes.

CAMPING AT NEWPORT

Is especially attractive. Accommodations ample, food supplies abundant and sanitary regulations are complete. Summer excursion rates from all parts of the Northwest.

Apply to any O. R. & N. or Southern Pacific agent for full information about rates, routes, and a copy of "Oregon Outings."

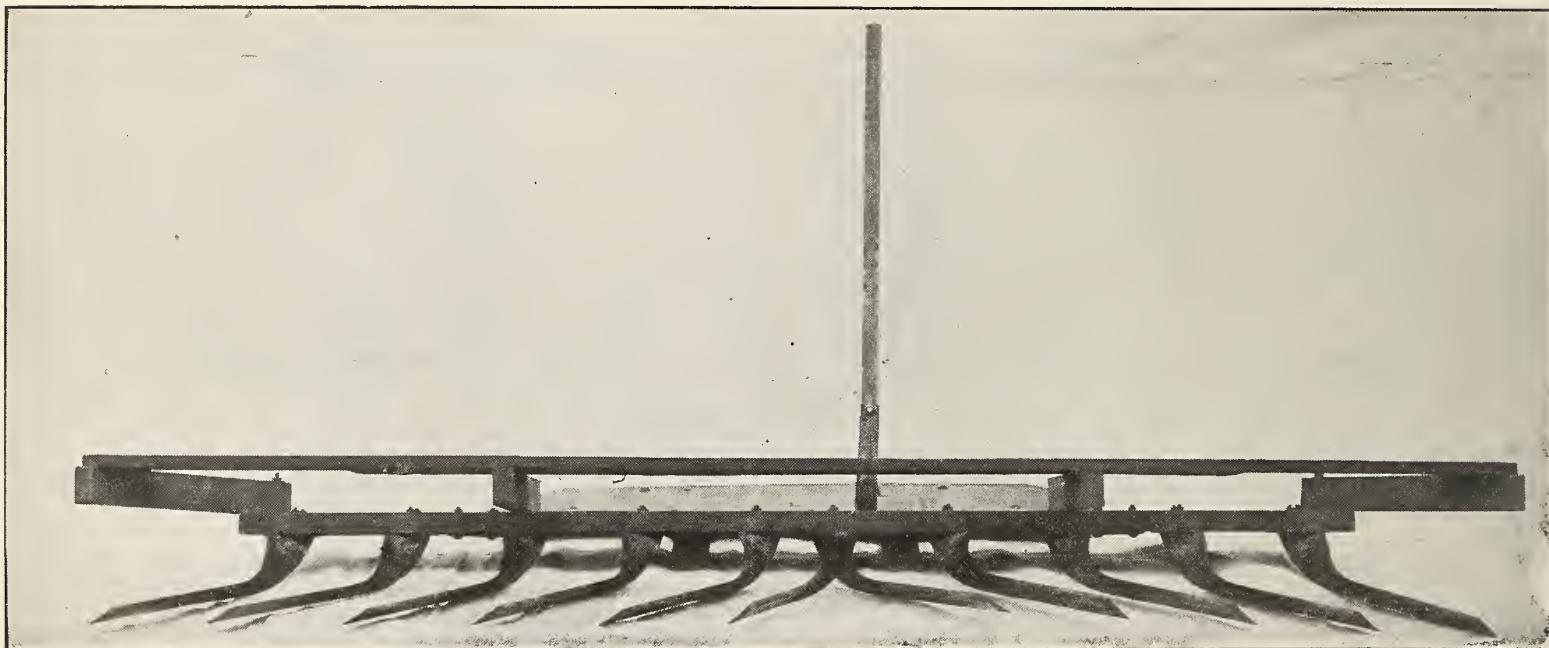
Wm. McMurray

General Passenger Agent

Portland, Oregon

THE KIMBALL CULTIVATOR

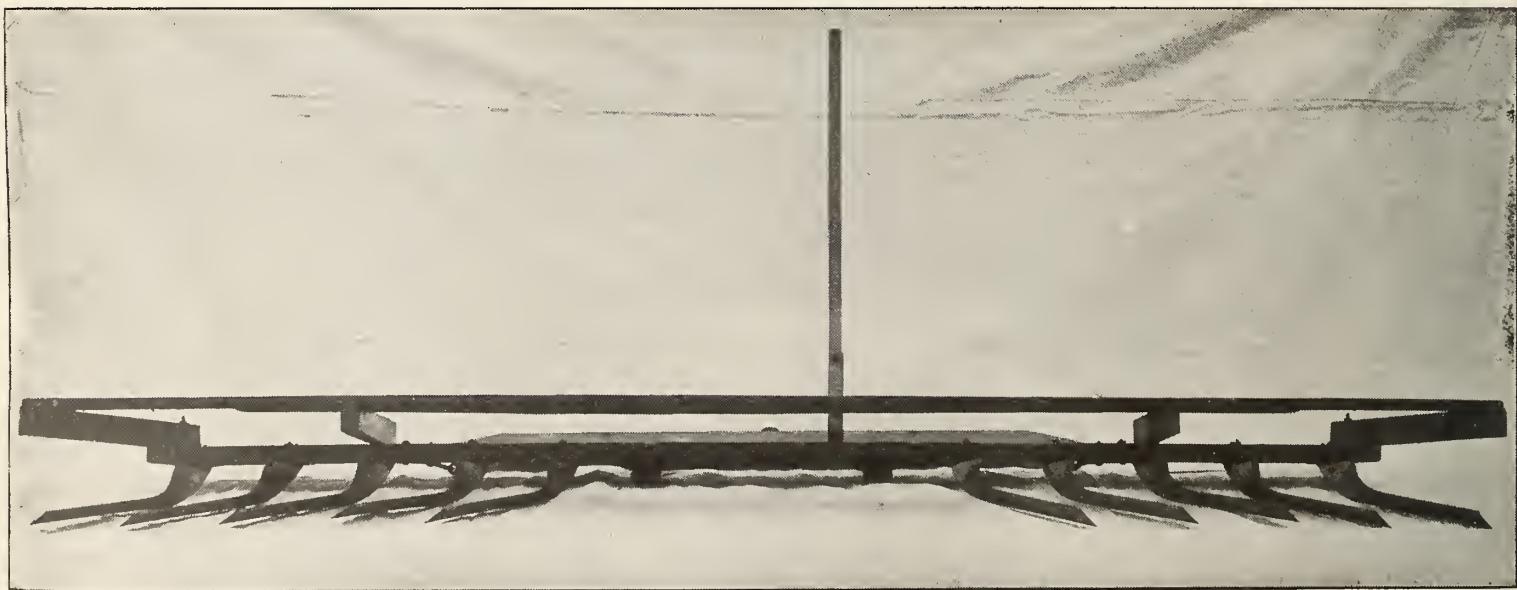
King of all orchard cultivators. Cuts below show two most desirable sizes for orchard work



This cut represents our eight and one-third foot cut which is extensively used in orchards and for working summer-fallow

It should be borne in mind that frequent stirring of the soil is very beneficial to orchard crops as it creates a dust which prevents capillary evaporation of moisture, the retention of which in the soil is absolutely essential to the production of a profitable crop

This cultivator will thoroughly cover one acre in one hour, thus easily performing the work of ten or twenty men. Price of the $8\frac{1}{3}$ foot \$20



This cut shows our twelve foot extension and is our latest and most up-to-date design specially constructed with a view to orchard work. The extension head throws blades far out to either side of center thus eliminating necessity of crowding horses under trees and avoiding all chance of abrasions by hames or other parts of harness coming into contact with limbs or trunks, or stripping lower limbs of fruit and leaves

Every up-to-date orchardist should have one of these tools. Price \$22.50

JOHNSTON & WEBER

Exclusive Agents for Oregon, Washington and Idaho

THE DALLAS, OREGON

GILBERT & VAUGHN IMPLEMENT CO., Local Agents, Hood River, Oregon

The Hardie Sprayers

A Reliable Bucket Pump Built to do Efficient Spraying

HAS A PLACE WITH EVERY LOVER OF GOOD FRUIT

Try Spraying once with our

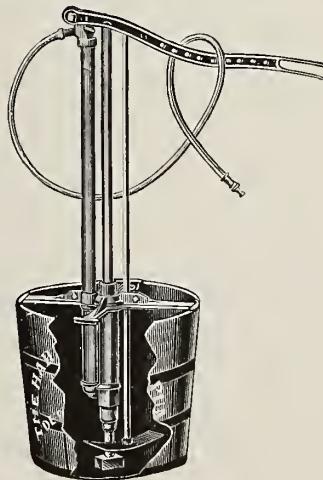
BUCKET OUTFIT

No. 10

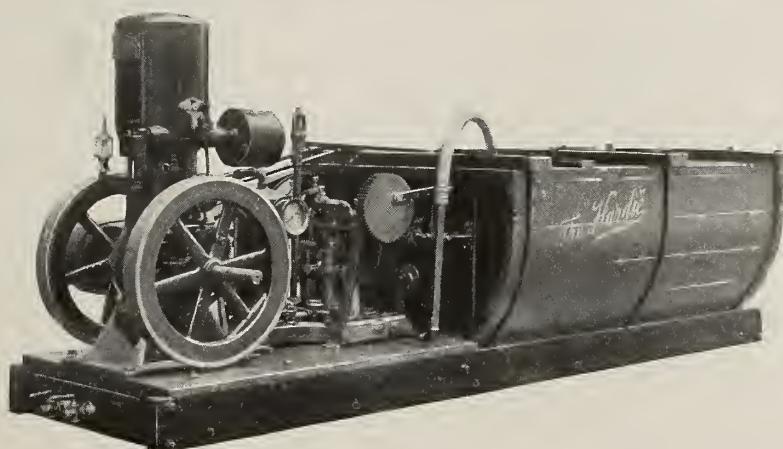
and you will see why they sell by hundreds

Suitable for small trees, vines, bushes, etc.

100 pounds pressure, a mechanical agitator, working with each stroke
of the handle, bronze ball valves are the features



*Nothing
to Watch
but the
Spray*



*The
Sprayer
with
the Trouble
left out*

TRIPLEX B

This sprayer meets the requirements of the commercial grower of fruit. **UNIFORM** high pressure is obtained by our construction. By means of three pumps mounted on one crank shaft a continuous pumping stroke is obtained. Set your relief valve by your gauge at desired pressure and you get it, not occasionally, but all the time.

Many distinctive features enter into its make-up. Our nozzle protector saves nozzle clogging. Our relief valve is made with the spring outside, away from contact with the liquid. Our machines are light in weight, reasonable in price.

If you are thinking of buying a machine either this fall or next spring, write us now. Our catalogue gives details of construction of our full line of over twenty different sizes of sprayers.

You can suit the size of your trees and your pocketbook with the Hardie line.

The Hardie Manufacturing Co.

Factory:
Hudson, Michigan

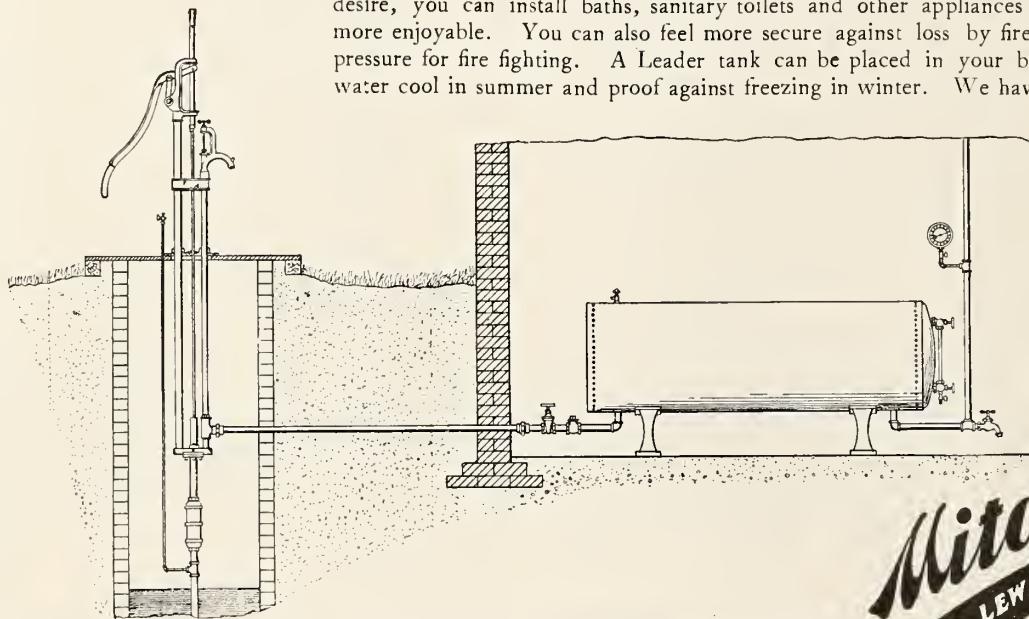
Western Branch:
22 Front Street, PORTLAND, OREGON

Leader Pneumatic Water Systems

Increase { Home Comfort
The Value of Your Property

A LEADER SYSTEM gives you all the conveniences of the city, no matter where your property and home may be. With it installed in your house you can have running water in every room, if you desire, you can install baths, sanitary toilets and other appliances which tend to make country life more enjoyable. You can also feel more secure against loss by fire as Leader tanks maintain a good pressure for fire fighting. A Leader tank can be placed in your basement, out of sight, making the water cool in summer and proof against freezing in winter. We have leader tanks in various sizes and

can furnish pumps of proper capacity for same. Tell us what your conditions are and our pump man will recommend an outfit best suited to your needs. Remember, it costs you nothing to ask and places you under no obligations to us



Mitchell
LEWIS & STAVER CO.

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OREGON

TO NORTHWESTERN FRUIT SHIPPERS

CHAPTER III.

In the two previous "ads" we have called attention to expensive information that you have acquired at retail and incidentally inferred that it would be profitable to you to get this information at wholesale through a membership in our organization

The object of this letter is to more particularly call to your attention another feature of the service furnished members that will effectively protect you when consigning your shipments. Sometimes it is better to consign than it is to sell; again, it is better to sell than it is to consign. In any event, it is well to be prepared to do either intelligently, and you, no doubt, would prefer to trade with the Produce Reporter Company's bonded commission merchant, other things being equal, than to trade with one who offered you no protection for your shipments.

This bonded commission merchant files with us a fidelity bond from the United Surety Company of Baltimore for \$5,000.00. This bond is backed by the assets of that company, of around \$1,000,000.00, and the commission merchant aforesaid enters into a contract with this organization to handle the shipping subscribers' business at not to exceed ten per cent, and agrees to furnish immediate itemized account sales as soon as the goods are sold, accompanied by a remittance for the correct amount; further, to permit the examination of his books at any time that said shipper is dissatisfied; this examination to be made either by the Produce Reporter Company or a representative of the bonding company. Surely any commission merchant who will back a wide-open policy like this should secure the preference. Such commission merchants are printed in heavy black-faced type in our reference book; their capital rating is shown, also their specialties and the number of cars that they handle a year, so you can form correct conclusions as to whether they are equipped properly to look after your interests. You know that they have arranged to protect you with a fidelity bond and give you their honest service; again, these very same parties, at certain times when consignments are not going forward, may be making purchases, and, other things being equal, they certainly will be very desirable customers for you. We would like to send you a booklet explaining the whole system, and particularly this bonded commission feature. We also bond brokers who may act as your representatives in the different cities where sales may be made, and you will find that they will add materially to the effectiveness of your sales department. They also give a bond for your protection upon any goods that may be released to them. It may be advisable to divide cars sometimes, or possibly when a car is refused it may be necessary to release the car for distribution to several parties. Write for particulars to

PRODUCE REPORTER CO.

34 South Clark Street, Chicago, Illinois

Perfect competitive river and rail transportation. Home City 6000 inhabitants. Grand Columbia River scenery. Small investment gives you independence for life amid delightful surroundings



Choice Cherries, Peaches, Apricots, Apples, Prunes, Plums, Nuts, Grapes, Melons, Berries, Vegetables, Wheat, Barley and other cereals grown in great abundance without irrigation



THE KINGDOM
OF THE
COLUMBIA
IN THE MIDST OF WHICH IS
NUTLAND HILLS
SOLD IN PLANTED ORCHARDS BY
JACOBS-STINE CO.
LARGEST SUBDIVIDERS ON THE PACIFIC COAST

118 FIFTH ST. PORTLAND OREGON

GIBSON, LATHROP, REAL ESTATE, LANDSCAPE ARCHITECT,
AND TOWN PLANNERS, LOS ANGELES, SAN FRANCISCO, PORTLAND